

# MARINE RECORD

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To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interest of Lake Carriers, and improve the character of the service rendered to the public.

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### AN ILLUMINATED LIFE LINE.

In spite of the magnificent work of the life-saving corps of the government, and regardless of the apparatus for the rendering of aid to the shipwrecked which is at their command, many a life has been lost by the inability of the persons who are clinging to a wreck to see the line shot at them from the shore, or, if it reaches the rigging, to tell just where it might be seized upon. As in such cases minutes mean lives, the inability to see and grasp the lifeline without the delay of a second has lessened the population of the earth by several in many, many instances, says a Washington letter. The idea which Mr. Plass has successfully evolved is to provide a lifeline which emits a phosphorescent light of sufficient luminosity to be visible for a long distance immediately it leaves the mortar's mouth, and is shot through the gale to the wreck. In the past if it happened to be daylight when the life savers were at work, they could, by means of their glasses, tell whether or not they had landed a lifeline aboard the wreck. It unfortunately happens, though, that the majority of wrecks occur at night, and, therefore, a luminous lifeline becomes an invention of the first importance. By its use the life-savers can tell exactly what has happened to the line. There need be no more uncertainty.

It is estimated that the luminous line of Mr. Plass will be visible with as much distinctness as if the light were emitted from a 56-candle power electric bulb. In that way, unless the storm were too dense, the line would be visible its entire length from shore to wreck, and the watchers on the beach could tell just what progress toward safety was being made by those whose lives they were trying to save.

## U. S. CONSULAR SERVICE.

In his recent speech in Congress, in behalf of American shipping, Senator Elkins said: The consular service costs annually about \$400,000. It was established and is still maintained for the extension of our trade in the various ports and districts where established. It will be found that a large part of this sum is yearly expended in salaries to consuls at ports where American vessels are rarely seen. We send consuls to Glasgow, Hull, Cardiff, Manchester, Belfast, Dublin, Cork, Portsmouth, Amsterdam, Stockholm, Christiania, Bergen, Palermo, Venice, Athens, Constantinople, Bayonne, Genoa, Naples, Rotterdam, Copenhagen, and all ports on the Baltic and Black seas, and during the year 1895 not an American vessel touched at any of these great ports. If the American people are to allow shipping to continue to decline and finally disappear from the high seas, why maintain a foreign consular service at so great an expense?

## A CANADIAN FINED.

The steamer Colin Campbell was fined \$100 by the collector of customs last week at Chicago. The offense charged against the Campbell was the blowing of cross signals in Chicago river, and was preferred by the revenue cutter Calumet. The captain of the Campbell was summoned before the collector of customs, and as he admitted the truth of the charge, the fine was entered against the boat. This is one more reason why the American rules should be made international on the lakes, or between Montreal and Duluth. With United States tonnage the White bill rules and Canadian tonnage must therefore comply with its terms when in American ports or waters.

## DRILL SHIP.

In the opinion of the navy department the hope of the Detroit Naval Reserves that they will be given a warship to use on the lakes is likely to be rudely disturbed, for no such plan is considered. One of the chiefs of the department said: "No such thing as supplying the Yantic, armed for warfare, to the Michigan Naval Reserves, has been considered. It would be against the treaty regulations with Great Britain and only involve needless trouble. The Yantic, equipped as a barrack, would serve all purposes for which the naval reserves want a ship, and involve no trouble. If the naval reserves want an outing, for the practice of the drills, they can wait for the Michigan and thus render the use of the Yantic for barracks easy."

## GRAIN TRADE.

New York is with reason becoming alarmed as to the evident decline in her grain trade, and is endeavoring to remove any disadvantages which operate to divert the flow of grain to other ports. Recently the New York Produce Exchange made to the Interstate Commerce Commission a charge that a differential freight rate extended to Philadelphia and Baltimore and operates to the injury of the commerce of New York. The charge was directed against the railroads comprising the Joint Traffic Association. The rate complained of represents two cents per cwt. in favor of Philadelphia, and three cents per cwt. in favor of Baltimore and Newport News.

The first hearing of the case by the Interstate Commerce Commission occurred in New York on the 15th of March, when the complainants presented arguments in support of their charge. The second hearing was held in Philadelphia on Monday and Tuesday of this week. At this second meeting a member of the New York Produce Exchange presented statistics compiled to May 1,

showing the percentages of exports from New York, Philadelphia, Baltimore and Newport News. From this statement it appears that New York lost 6 per cent., while Philadelphia gained a like amount, and Baltimore and Newport News gained respectively 6 and 19 per cent. New York's loss is ascribed to the operation of the differential rate which is the subject of the inquiry. Tables of exports of corn from six Atlantic ports show that while the tonnage of New York increased only 10 per cent, the increase at Philadelphia was 67 per cent, and that at Baltimore and Newport News approximately the same. The representative of the New York Produce Exchange who presented these figures charged that the grain traffic has been cornered by the Philadelphia and the Baltimore & Ohio, roads, and that these lines manage to get as much profit out of the reduced New York traffic as they do out of the ports in favor of which discriminating rates are made. On the part of Philadelphia it was shown that the differential rate complained of has been in force for thirty years, and that this long tenure of validity showed that the rate had justice and equity to commend it. It was shown, further, that New York's maritime advantages and terminal facilities are such as to make the differential rate an absolute necessity for Philadelphia.

The next sitting of the Interstate Commerce Commission on this important case will be in Washington on the 20th of June, when the New York Produce Exchange is to have the privilege of examining more witnesses to rebut the points made by Philadelphia and Baltimore. The case is one of interest to shippers and vessel men on the lakes and it bears upon the integrity of the Erie Canal trade and the grain trade at Buffalo. It is evident that some cause exists for New York's loss of trade. It may be a natural cause, and it may be discrimination. The fact that for years an elevator monopoly waxed fat on the New York trade at Buffalo is proof that such drawbacks can exist. New York is certainly justified in examining into the decline in her grain trade.

## LUMBER IMPORTS.

"There is a big rush of lumber from Georgian bay to American ports," said Clarence A. Parker, of Detroit, who has been making a number of new lumber charters in the past week and has 23 cargoes waiting that have not been placed yet. "Any vessel that will go into that region may have a load. Canadian lumbermen want to get in here ahead of the tariff. I placed one charter at \$1.20 yesterday, an advance of 7 cents on the going rate, and there will be still further advances. I have one load at a 25-cent advance from a port that allows only six-foot draft. With the stiff demand now certainly arising in Canada, we will see a decided improvement in lumber freights."

From Saginaw it is reported that L. C. Slade has purchased 1,000,000 feet Canadian lumber of the Cutler & Savidge Lumber Co., at \$2 per 1,000 delivered in Saginaw, less than the same stock was worth on the mill docks last year. Randall & Boyd, of Saginaw, have purchased 500,000 feet in Canada. In these contracts it was stipulated that the lumber must be moved before July 1. It is certain that if vessels can be obtained, 10,000,000 feet of lumber will be brought out of the Georgian bay before the new tariff law becomes operative.

A telegram has been sent to the Secretary of the Treasury requesting that a search be made for the missing survivors of the American schooner General Siglin, and the revenue cutters proceeding north in the Pacific have been ordered to make the examination of the ocean in the vicinity.



## NEWS AROUND THE LAKES.

## CHICAGO.

Special Correspondence to The Marine Record.

A. H. Fitch chartered the steamer Sibley and consort Twin sisters for oats to Buffalo.

There was a decided improvement in sales on the lumber market this week, the majority of the cargoes having been sold on Monday.

At the Independent Tug Line's floating dry dock the tugs J. W. Gardner and Monitor were in for repairs to stern bearings; the tug Crosby for repairs to stem and stern bearings.

J. J. Rardon & Co. chartered the steamers Yakima and Aragon for corn to Buffalo at 1½ cents; the steamer City of London for oats to Buffalo and the steamer Phenix for corn from South Chicago to Buffalo.

At the Chicago Shipbuilding Co.'s shipyard the tug Elphicke was in dry dock for a new wheel, the steamer Manitou for bottom cleaning and painting, the steamer E. M. Peck is in dock for repair to damages sustained by running on Hyde Park reef last week. She will require part new keel and some bottom plank and calking all over.

The steamer I. Watson Stephenson, light, going down Chicago River, and the schooner Bertha Barnes, lumber laden, in tow of the tug Charnely, going up the river, came into collision Friday afternoon, just below State street bridge. The Stephenson received considerable damage to her bridge and cabin and the Barnes had her jib boom, bowsprit and head gear carried away.

Grain rates are down a notch, charters being reported at 1-18 cents on corn to Buffalo. It is claimed that the rate has been off since Saturday and that charters have been made with the rate one-sixteenth of a cent lower than rates were reported. Charters: to Buffalo, Plankinton, Neosho, Helena, Phenix, corn; London, Sibley, Twin Sisters, oats; to Port Huron, Sachem, corn.

H. W. Cook & Co. chartered the steamer Panther for oats from South Chicago to Buffalo at 1½ cents; steamer Glasgow for oats, Washburn to Buffalo, at 1½ cents; steamers Wm. B. Morley, New Orleans, and W. H. Wolf for oats to Buffalo at 1½ cents; steamer Westover and consort Bliss for dry lumber from Manistique to Chicago at \$1.00 per M feet; schooner Delosde Wolf for dry dressed hemlock lumber, Manistee to Cleveland, at \$1.50 per M feet.

Captain William Turner, one of the oldest and best known vessel masters on the lakes, died at No. 5326 Union avenue, this city, at 10 o'clock Wednesday morning. The cause of his death was Bright's disease and heart failure. Captain Turner commanded the steamer George Dunbar for over twenty years, resigning last fall to sail the steamer Hattie Persue. He had been ill about a month. He had been treasurer of the Chicago branch of the Shipmaster's Association from its inception, seven years ago. Captain Turner was of English birth, and was seventy-five years old.

The launch of the big Corrigan barge Amazon will not take place on Saturday, as was planned. The position of the vessel on the stocks makes it necessary to launch her into the dry dock, which is occupied by the steamer E. M. Peck. The repairs on the Peck are proving much more extensive than was at first thought necessary, and it will be impossible to get her out in time for the launch Saturday. The Amazon will go into the water just as soon as possible, and will be ready for sea within a day from the time of her launch, everything being in place but the spars and anchors. The construction of this vessel, the largest of her class on the lakes, has taken but a few days over a month.

At Miller Brothers' shipyard the schooner Clara was in dock for some bottom calking, the yachts Sadie and Mistral for bottom cleaning and painting and some calking; the yacht Blade to have her fin keel put on, the steamer Soo City for a new shoe, by Donaldson Brothers, and some calking, the steamer City of Holland for refastening and recalking and 30 new knees, the steamer City of Duluth for repairs to damages done by the steamer Mariska through colliding at Sault Ste. Marie, comprising some new frames, ceiling and outside plank, some new clamps and shelf piece, 20 new knees, repairs to her main deck and some new covering board and calking; the schooner Rouse Simmons for a new piece of stem and some bottom calking.

## TOLEDO.

Special Correspondence to The Marine Record.

The steamer Oscar T. Flint was chartered by J. P. Nagle, coal, to Milwaukee on private terms.

At Gilmore's the two large new dump scows are getting well along, besides considerable repair work and more in sight.

Capt. James McNelly is building a new wharf for Kelsey & Freeman and another for Barbour & Starr. He has a force of men at work repairing the wharf at Presqu'ile.

The steamer Arundell, Capt. J. J. Hoover, is now on the Detroit route and receiving fairly good patronage in passengers as well as cargo. John Bouton is chief engineer.

The Craig shipyard is rather a lively spot just now, about 125 men being employed. A large staff was on the pay roll all winter and the industry is quite important to this port.

The schooner Montpelier arrived here this week minus her foremast, which went by the board in a gale she encountered in her trip down with lumber. She will un-

dergo a thorough overhauling before leaving port again and put in first-class condition for the season's work.

The steamer City of the Straits, of the D. & C. Line, Capt. Duncan McLachlan, will be here on June 1 and take an excursion of teachers and pupils of the public schools to Put-in Bay.

Captain D'Clute of the steamer Louise, reports that the fog horn at "the dummy" Pelee Island is disabled and will not be in operation again until some time next week. Information will be given as soon as the horn is repaired.

The chartering of eight large steamers at Cleveland last Saturday to carry Rockefeller-Carnegie ore from Duluth to Lake Erie ports at 60 cents and the later falling down on the charters has caused a good deal of comment in vessel circles here. Charters could no doubt be made now for 50 cents, but that is no reason for breaking off on last week's work of chartering. Owners will probably make more binding agreements in the future so that they may know what they are doing.

Harbor Master Skeldon has kept a record of the times that swings have been made at the city bridges during his term of office. It shows that in April, 1896, the number of swings made at the Cherry street bridge was 1,010. For April, 1897, the number was 603. At the Perry street bridge in April, 1896, 157 swings were made for craft to pass through, and in April, 1897, the number was 115. This shows that the number of craft that passed through the bridges named in April this year, was less than for the corresponding time last year by 449.

## BUFFALO.

Special Correspondence to The Marine Record.

The schooner Sweetheart was in the Mills dry dock this week for calking and minor repairs.

The Buffalo furnace, as well as the Tonawanda furnace, is receiving quite a little jag of ore so far this season.

There is less coal offering than there was last week. Most of the shippers have only enough to take care of the tonnage chartered last week.

There are yet a number of vessels here that have not yet fitted out the season and there is no telling when they will from the present outlook.

The steamer Russia was not seriously damaged by stranding on Mackinaw Point. In dry dock is was found necessary to take off but two plates.

The steamers Penobscot and Selwyn Eddy, which were laid up, have been sent to Lake Superior for grain. The Lagonda goes to Duluth with coal.

The passenger boat Island Belle left here Sunday for Portland, Me. She was sold a few days ago by Richard Humphrey and others, of Black Rock, to Capt. John Barry, of Portland.

The Cleveland steel canal steamer Beta and consort, were libeled this week on action made by Charles E. French, who wants damages for loss sustained in a collision between the Beta and one of his boats.

Members of the crew of the wrecked steamer Florida say they have strict orders to say nothing of the disaster. Chief Engineer Wise would say nothing further than that there were errors in the reports of the accident.

The cargo of the Wilson Line steamer Carnegie, which brought in this week 182,159 bushels of wheat, breaking the Lake Superior record once more, also breaks it as to value of grain cargo, no doubt, as it is invoiced at \$131,200.

Coal shippers say that the vessels are carrying heavier loads this season than common. The reason is of course on account of the good water and the low freights. The water has been up to the normal height almost every day this spring.

The Commercial Transportation Co. has chartered the steamer I. W. Nicholas to carry flour. The company is composed of Minnesota and Wisconsin millers, who organized it as an independent line to transport flour to Buffalo in opposition to the regular lines, and they figure to reduce expenses about 50 cents per ton by doing their own work.

The six wooden steamers of the Lehigh Valley Line have been painted and some other work has been done on them, but it is said that they will not be brought out so long as freights are at their present low stage. The management is of the opinion that it is cheaper to carry coal in other people's boats at these rates. There is a big fleet of idle boats lying at the breakwater waiting for something to do.

There is every indication of a quiet week in the coal market. A report has been circulated that John Gordon would not bring out the steamer Globe in his line this year, but that she would go into the Mutual line of Cleveland after a time. Mr. John Gordon denied this and states that the steamer will come out late this week, when it is expected that the Big Four will have its docks in Cleveland ready for an exchange of freight.

The timely passing of the steamer Tom Adams saved three men from drowning in Lake Erie Sunday. Captain Nicholson of the Adams reports that he found the three men, Walter Reese, George Chapin and Charles Dunlap, in the little steam yacht Queen of the West, adrift in the lake. The men had been out all night and were nearly exhausted. The boat was in danger of swamping, as a gale was blowing at the time. The boat, when found, was off Port Colborne. The Adams gave the yacht a line and towed her into this port.

Major T. W. Symons, corps of engineers United States Army, says that work on the Buffalo breakwater will be pushed along rapidly. There is \$125,000 of the old appropriation available at present and \$481,000 of the new one will be ready on the 1st of July. This means that some-

thing more than \$600,000 can be used during the present season in the carrying on of the work. Mr. Hughes, of Hughes Bros. & Bangs, the contractors, said: "The contract under which we are working calls for completion in four seasons, and at the end of the time we hope to have for Buffalo the best breakwater on the lakes. The full appropriation of \$2,200,000 should be sufficient for the work, and you may be sure that nothing will be left undone to carry out the plans of the department."

Arrangements have been made by which the steamer George W. Roby will not be tied up in the collision suit over the loss of the Florida. Service of papers will be made without a formal libel. The loss to the Roby from sinking the Florida was much smaller than was expected. She only needed a new stem, and is already out of dry-dock. The dispatches state that Charles E. Kremer, of Chicago, will represent the Florida in the coming litigation. It is difficult to see how this mistake could have been made. It is well known here that between Mr. Kremer and Mr. McCurdy, agent for the London companies holding the insurance on the steamer, the greatest ill-feeling exists, caused over some past transaction. John C. Shaw, of Detroit, will represent the Florida, and H. D. Goulder, of Cleveland, the Roby.

## CLEVELAND.

Special Correspondence to The Marine Record.

Mr. Robert Logan, consulting engineer and marine surveyor, returned home on Wednesday after a business trip up the lakes.

Capt. Geo. A. Bell has registered at the custom house as master of the steamer City of Naples, and W. H. Blattner as master of the J. C. Gilchrist.

Mr. Joseph R. Oldham will leave shortly for England and while there will witness the jubilee proceedings in honor of Queen Victoria.

The steel steamer Cadillac is in the Cleveland dry dock this week undergoing rather extensive repairs to her bottom after stranding on Starve Island Reef, Lake Erie.

The D. & C. line will again raise its rates. On and after June 1 the fare between Cleveland and Detroit will be \$1, with 50 cents additional for upper and 75 cents for lower berth. Grummond gives no indication of starting his steamer.

The total loss of the steamer Florida will cost the foreign insurance companies something like \$140,000, \$80,000 of which is on the hull and \$60,000 on her cargo. It has not yet been ascertained whether her freight was insured or otherwise.

The C. & B. Line will run boats daily hereafter. At first only the City of Buffalo was put on, then the State of Ohio was added, but the Sunday night trip was left out. The boats will run next Sunday night. So far the weather has been too cold for the passenger business to flourish.

In the matter of chartering several boats last week, the Rockefeller firm do not wish the ore brought down for some time yet, consequently the several charters are held off until the ore is required, which may not be for sixty days yet. This break has not helped the freight market this week; in fact it has had the opposite effect if anything.

Many of our readers will be sorry to learn that Mr. John F. Pankhurst is still under the weather somewhat. It was confidently expected that by this time Mr. Pankhurst would have been back at business again but his health does not improve as rapidly as could be wished. When the mild weather sets in there is no doubt but that a marked improvement will soon take place.

The Light-house tender Haze, Capt. John Baxter, reached this port on Tuesday and left again early on Wednesday morning for all ports along the south shore and on to Detroit River. Only a short time ago there were but three aids to navigation from the mouth of Detroit River up to the end of the district. There are now seventeen. Commander Gridley, U. S. N., formerly light-house inspector for the district, has been detailed to duty at Philadelphia and the new inspector is on the cruise with the Haze.

On her second trip down, the large new steel schooner Constitution recently launched from the yards of the American Steel Barge Co., smelled the bottom in the "Soo" river and has been dry docked here at the shipowner's dry dock for survey and repairs. The damage is much more extensive than was anticipated, there being about eighty feet of damaged bottom on the starboard side in No. 1 tank. Mr. Robert Logan will represent the underwriters of the survey and Mr. Robert Curr the owners of the vessel, the Interlake Co., Messrs Pickands, Mather & Co.

The steamer J. H. Outhwaite, bound up, ran into the headgates of lock No. 7 in the Welland Canal on Friday last and carried them away, the canal overflowing its banks and creating considerable damage. The Dominion officials demanded \$10,000 security from the owners of the Outhwaite before allowing her to proceed. It is thought that \$2,000 will cover the damages and the vessel herself is reported to have her rudder stock twisted.

On Friday last the Minnesota Dock Co., at Ashtabula, laid off all their men and gave them notice that hereafter they would pay them 25 cents an hour. The company had been paying engineers \$57 per month. The engineers refused to accept the terms offered, and the Matoa, Frontenac and 105 could not be unloaded. A conference was held and the company agreed to pay the men 25 cents per hour and give them full time for every day they are called out. The agreement is a compromise. The men then returned to work.



## DETROIT.

Special Correspondence to The Marine Record.

Johnston Bros. of Spring Lake, Mich., have a contract for building two large steel scows for the government, to be used at Chicago.

J. A. Leach, of Fort Wayne, Ind., is the latest applicant for the position of supervising inspector of steam vessels for this district. However, the plum is likely to be accorded to ex-Inspector Westcott, of St. Clair, Mich.

Clarence L. Parker made an even twenty-four lumber charters last week. Some recent ones are: Propeller Hopkins and barges, capacity 2,000,000 feet, basswood, Menominee to Cleveland and Buffalo, \$1.50; steamer St. Lawrence, Wariton to Detroit, hard wood, \$1.75; propeller Ogemaw and tow, Georgian Bay to Oscoda and Buffalo, \$1.20; steamers C. H. Davis and Martini, Georgian Bay to Bay City; propeller Haywood and barges, Menominee to Buffalo, going rates.

Some of the vessels laid up here all the spring have been getting under way during the past few days. A. A. Parker's steamer, John Oades, towing two schooners, has gone for coal to be delivered at Portage. The schooners Mystic Star and Reuben Dowd have gone for coal to Erie, and will bring down lumber from Owen Sound and Georgian Bay. The steamer Colonial, which has been undergoing repairs at the dry dock all this spring, went for ore, and the steamer Kaliyuga, which has been fast to the side of the Colonial for months, follows. A. McVittie's steamer, Senator, is reported about to leave, and A. A. Parker's schooner Saveland is said to be fitting out.

Charles A. Chamberlain and others are about to bring suit against the several insurance companies that held the insurance on their steamer W. H. Barnum, which was cut down by the ice and sank in the Straits of Mackinaw in the spring of 1894. The companies were represented by Smith, Davis & Co., of Buffalo; C. A. MacDonald, of Chicago and a New York agency. The owners claimed the steamer was worth \$30,000, which would allow them \$22,000, and this is the amount they sue for. The companies hold that she was worth not more than \$22,000, which would allow her \$14,000 insurance. They will contest the claim on the ground that she was unseaworthy, being in need of a rebuild—which might have brought her value up to \$30,000, and that she was poorly handled at the time.

In retracing the history of the Barry Bros.' floating dry dock at Chicago, the Free Press finds that forty years ago the hull was originally named the Ben Wade, owned by Capt. Eber Ward. She was a steamer 230 feet over all, and had powerful machinery. Later she became a tow barge, afterwards placed in the St. Joe and Chicago fruit trade and ultimately sold to Barry Bros., who cut the ends out of her and towed her to Chicago for a floating dry dock in which to repair their tugs. To transform her, the bow and stern were sawed off, leaving 150 feet of the hull. Sluices and valve gates let the water in and out of this hull, which sinks or floats, carrying the tug to be repaired with it. Strange as it may sound, the owners claim she is making more money than as a carrier, as they do jobs for other vessels than their own and thus she is all the time earning a little.

## FLOTSAM, JETSAM AND LAGAN.

"Mamma, what is a delusion?" "Well, it is your father's idea that with a \$50 rod he can catch 50 cents worth of fish."

Kingston credits the steamer Rosemount with the largest grain cargo ever delivered at that port—76,790 bushels of wheat from Fort William.

"I'll wager that woman submarine diver doesn't stay under the water more than ten minutes at a time." "Why?" "Nobody down there to talk to."—Chicago Record.

A dispatch from Fairport states that the steamer George H. Dyer ran 800 bushels short on a consignment of 40,000 bushels of rye, delivered at that port for the Baltimore & Ohio line.

The master of the Grosse point light vessel (No. 10), reports that Saturday a vessel ran into and destroyed the cluster of piles known as the lower entrance beacon; it will be replaced.

The steamer Queen City, loaded at Ashland this week, 5,843 tons of iron ore, the largest ore cargo ever taken from Lake Superior, and the barge George E. Hartnell 4,800, gross tons of iron ore from Escanaba.

The hull of the old steamer R. C. Reid, which was sunk at St. Joseph two years ago, was this week towed out into the lake and sunk. It would appear as if this was moving an obstruction from one place to another, but there is no one to say nay.

During April six vessels, of a total tonnage of 14,800, were launched from the shipyards on the Wear. This brings up the total for the present year to 17 vessels, aggregating 48,945 tons, as against 34 vessels, of 96,385 tons, for the same period of last year.

One of the most successful log drives ever made was finished this week on the Escanaba River. A clean drive of 25,000,000 feet of logs has been made on the main and west branches of the Escanaba. This is the first clean drive made in a Northern stream in many years. The logs belong to Isaac Stephenson, of Marinette, Wis.

For a woman to "take the wheel" nowadays does not at all imply that she is able to steer a vessel. It may be only a bicycle that monopolizes her attention.—Marine Journal. It does imply, however, that she is able to take her "trick at the wheel" and a number of them, to put the masculine gender to the blush at that. To hang it out for seven days

at a stretch is more than any flat-footed old sailor would tackle the wheel for, even if it is only a two-spoke one.

The Duluth News-Tribune says if expectations regarding the crop this year are realized, the lake freight situation will be greatly improved from August forward. Unless all signs fail, it says, the banner crop year of 1894 will be beaten out of sight by the crop of 1897. From all reports, the increase in wheat acreage will be greater than was expected earlier in the season. In many instances farmers plowed all the ground that they expected to use, and then finally put it all into wheat and plowed more land for other crops.

## TREASURY DECISIONS RELATING TO VESSELS

(17874.)

Effects and wages of deceased seamen.

Treasury Department, Bureau of Navigation,  
Washington, D. C., March 5, 1897.

To collectors of customs, shipping commissioners, and others:

Your attention is invited to the provisions, concerning the effects and wages of deceased seamen, of the act approved March 3, 1897 entitled "An Act to amend the laws relating to navigation." The act will take effect July 1, 1897.

Sec. 4. That section 4541 of the Revised Statutes be, and is hereby amended by striking out the words "district judge for the district," in the seventh line of said section, and substituting in place thereof the words "circuit court of the circuit;" and that said section be, and is hereby, further amended by striking out the words "district judge" where they occur in the eleventh and twelfth lines of said section and substituting in place thereof the words "circuit court."

Sec. 6. That section 4542 of the Revised Statutes be, and is hereby, amended by adding thereto the words "or where he died."

Sec. 7. That section 4545 of the Revised Statutes be, and is hereby, amended to read as follows:

Sec. 4545. A circuit court, in its discretion, may at any time direct the sale of the whole or any part of the effects of a deceased seaman or apprentice, which it has received or may hereafter receive, and shall hold the proceeds of such sale as the wages of deceased seamen are held. When no claim to the wages or effects or proceeds of the sale of the effects of a deceased seaman or apprentice, received by a circuit court, is substantiated within six years after the receipt thereof by the court, it shall be in the absolute discretion of the court, if any subsequent claim is made, either to allow or refuse the same. Such courts shall, from time to time, pay any moneys arising from the unclaimed wages and effects of deceased seamen, which in their opinion it is not necessary to retain for the purpose of satisfying claims, into the Treasury of the United States, and such moneys shall form a fund for, and be appropriated to, the relief of sick and disabled and destitute seamen belonging to the United States merchant marine service.

EUGENE T. CHAMBERLAIN,  
Commissioner.

Approved:

J. G. CARLISLE, Secretary.  
(17875.)

Entry and clearance of vessels navigating the waters of the northern, northeastern, and northwestern frontiers of the United States, otherwise than by sea.

Treasury Department, Bureau of Navigation,  
Washington, D. C., March 5, 1897.

To collectors of customs and others:

Your attention is invited to the following provisions, concerning the abolition of fees for the entry direct from a foreign port and for the clearance direct to a foreign port of vessels navigating the waters of the northern, northeastern, and northwestern frontiers of the United States otherwise than by sea, of the act approved March 3, 1897, entitled "An Act to amend the laws relating to navigation." The act will take effect July 1, 1897.

Section 9. That fees for the entry direct from a foreign port and for the clearance direct to a foreign port of a vessel navigating the waters of the northern, northeastern, and northwestern frontiers of the United States otherwise than by sea, prescribed by section 4382 of the Revised Statutes, are abolished. Where such fees, under existing laws, constitute in whole or in part the compensation of a collector of customs, such officer shall hereafter receive a fixed sum for each year equal to the amount which he would have been entitled to receive as fees for such services during said year.

EUGENE T. CHAMBERLAIN,  
Commissioner.

Approved:

J. G. CARLISLE, Secretary.

DUTY TO STAND BY.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in every case of collision between two vessels it shall be the duty of the master or person in charge of each vessel, if and so far as he can do so without serious danger to his own vessel, crew, and passengers (if any), to stay by the other vessel until he has ascertained that she has no need of further assistance, and to render to the other vessel, her master, crew, and passengers (if any) such assistance as may be practicable and as may be necessary in order to save them from any danger caused by the collision, and also to give to the master or person in charge of the other vessel the name of his own vessel and her port of registry, or the port or place to which she be-

longs, and also the name of the ports and places from which and to which she is bound. If he fails so to do, and no reasonable cause for such failure is shown, the collision shall, in the absence of proof to the contrary, be deemed to have been caused by his wrongful act, neglect, or default.

Sec. 2. That every master or person in charge of a United States vessel who fails, without reasonable cause, to render such assistance or give such information as aforesaid shall be deemed guilty of a misdemeanor, and shall be liable to a penalty of \$1,000, or imprisonment for a term not exceeding two years; and for the above sum the vessel shall be liable and may be seized and proceeded against by process in any district court of the United States by any person; one-half such sum to be payable to the informer and the other half to the United States.

## NOTICE TO MARINERS.

Department of Marine and Fisheries,  
Ottawa, Canada, 15th May, 1897.

1.—Dredging, Port Colborne Harbor.—A government dredge will begin the removal of some shoals at the entrance to Port Colborne Harbor, Lake Erie terminus of the Welland Canal, this day, and will continue at work until the contemplated improvements are completed. Mariners are warned of the temporary obstruction which the presence of the dredge will be and are required to give her a good berth and also to check down in passing her, so that dredging operations may not be interrupted.

2.—Richards Landing Light Discontinued.—The private light on the outer end of the wharf at Richards Landing, North Channel, Lake Huron, has been discontinued. It has not been in operation this year.

F. GORDEAU,  
Deputy Minister of Marine and Fisheries.

Light-House Establishment,

Office of the Light-House Inspector, Ninth District.  
Chicago, May 26, 1897.

Notice is hereby given that the light in the Poverty Island Shoal red can gas buoy is reported as not burning. The light will be re-established at as early a date as possible.

By order of the Light-House Board.

Respectfully, E. H. C. LEUTZE.

Commander, U. S. N., Inspector 9th L.-H. District.

## TO FIRE THE BELLEVILLE BOILERS.

The bringing of 48 Spanish firemen to the lakes by the Northern Steamship Co., for service on their passenger steamers North West and North Land, has stirred the Lake Seamen's union to vigorous protest. Secretary Elderkin, of the National Seamen's union, declared that the sole object was to break down the union wage scale and that legal proceedings would be taken against the company for importing labor under contract.

Marine Superintendent J. M. Davis, of the Northern Co., says these men were brought from the coast because they endured heat better than Americans, and are not so quarrelsome.

E. B. Clark, general agent of the Northern Steamship Co., at Detroit, said: "Secretary Elderkin is very much mistaken when he says the company has brought in these Spanish firemen to break down the wage scale. These men are paid \$40 a month, and the union rate is only \$35. We paid \$40 last year and offered a premium of \$10 per month additional to any man who would stay through the season."

There is no doubt but that great difficulty has been experienced in firing the Belleville boilers during the past two seasons, and the Northern Line are perfectly right in trying to secure competent labor. The Northern Steamship Co., has spent a mint of money on these large twin screw sister ships, and they are the only exclusively passenger steamers afloat on the lakes today. It would be a sad blow to marine interests at large if the boats were delayed or could not run through the entire passenger-carrying season on account of inadequate help. Relative to the importing labor part of it, the men were engaged in a United States port and that in itself is sufficient to protect the company against any claims.

## MARINE HOSPITAL ON PORTAGE LAKE.

It is expected that the government will soon appoint St. Mary's Hospital, at Hancock, a government marine hospital, and the announcement is looked for soon. The need of a marine hospital on Portage Lake has been felt for some time.

A telegraphic device has been invented by Isidor Kitsee, of Philadelphia, which, it is claimed, says the Marine Journal, will enable the sending of messages without wires to reach only the vessel designed for at any distance, according to the initial power applied. The principle may also be applied to speak railway trains. It is said that an English syndicate is backing the invention.

It is not every passenger steamboat line that can or cares to publish a weekly journal in the interests of their own line. The Fall River Line Journal, New York and Boston, is published weekly throughout the year, gives all information relative to times of departure and arrivals, routes, distances, etc., of the Old Colony Steamboat Co. and other lines coastal, as well as trans-Atlantic.



## PRACTICAL METHOD FOR FINDING COMPASS ERRORS.

### ARRANGED FOR MASTERS AND PILOTS ON THE GREAT LAKES

BY JOHN ROSS LATE MASTER LIGHT-HOUSE TENDER 9TH DISTRICT.

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#### CHAPTER I.

##### PREFACE.

The vagaries of the compass needle, especially on iron and steel ships, are a source of anxiety to all mariners; the loss of many lives and much valuable property is directly traceable to ignorance of the derangement of the compass. Progressive masters and pilots on the Great Lakes have long felt the necessity of a practical knowledge of the compass and a method to find its error under the conditions which obtain on the Lakes.

The object of these notes is to make known a plain and simple method for finding the compass error, and, what is of more importance, one that is especially adapted for use on the Great Lakes. It is also intended to show that a practical knowledge of the compass can be easily acquired by any master or pilot, and that the finding of the compass error, and applying the error when found, is much more simple than many have been led to believe.

In the writing and arrangement every consideration has been given to the peculiar conditions under which the Lake navigator labors; and for this reason nothing has been stated that is not applicable to Lake navigation. Technical terms have been used only where absolutely necessary to prevent confusion or misunderstanding.

No attempt is made to explain the theory of the compass error. The practical hints on compasses and notes on magnetism, variation, and deviation, contain information with which every master and pilot should be familiar; they will assist a learner to find the compass error and may stimulate him to further enquiry. Those desiring to make a closer study of these subjects should consult the Reports of the Liverpool Compass Committee. Evan's Elementary Manual for the Deviations of the Compass in Iron Ships, Naval Professional Papers No. 13, and Lecky's Wrinkles in Practical Navigation, all of which have, in some way, contributed to these notes.

Repetitions occur wherever it was thought they would serve to make the subject more easily understood.

Lieutenant Glennie Tarbox, U. S. Navy, to whom the MS. was referred for criticism, has materially assisted in its preparation.

JOHN ROSS.

Washington, D. C., March 15, 1897.

##### DEFINITIONS.

The following terms are defined to prevent confusion:

A "true bearing," or "true course," is a bearing or course laid down on a chart without regard to variation or deviation. The compass roses on the charts of the Lake Survey are for true bearings and courses.

If a true bearing or course be taken from the chart, and the variation at the place where the bearing or course is laid down be applied, the resulting bearing or course will be a magnetic bearing or magnetic course. Or, a magnetic bearing or magnetic course is a true bearing or course to which has been applied the variation.

A "compass bearing" or "compass course" is a bearing or course shown by the compass whether the compass is, or is not, compensated.

The difference between a magnetic bearing and a compass bearing, or between a magnetic course and a compass course, is the deviation or compass error. Whenever the words compass error are used they apply to the deviation alone and not to the combined variation and deviation. The words compass error and deviation are used indifferently to express the same thing.

The words vessel and ship are used indifferently to express the same thing.

##### COMPASSES.

###### THE STANDARD COMPASS.

Every iron or steel vessel should have at least two compasses, the standard and the steering. The standard compass should in every case be the navigating compass. It should be a liquid compass with card  $7\frac{1}{2}$  inches\* in diameter, well balanced, sensitive in smooth and steady in heavy weather; or a dry compass with card 10 inches in diameter and possessing the same qualities. Either liquid or dry compass should be from some reliable maker; it pays to get the best. The compass card should read to degrees in addition to the points, and the degree marks should be clearly defined, not blurred. A simple test for a compass is to place it in position, and with a jackknife or piece of iron deflect the needle; remove the knife or iron quick-

ly and note the time it takes the card to come to rest at the exact degree it started from. If the card is very slow in coming to rest or does not return to the exact degree it started from, something is wrong with the compass. The standard compass should be fitted with an azimuth circle, i. e., a circle for taking direct bearings of any object.

###### THE STANDARD COMPASS BINNACLE.

The best binnacle is one that will admit of compensating for the deviations by placing the magnets inside the binnacle instead of placing them about the deck. In these binnacles the deviations can be compensated by practical methods which are explained by the instructions furnished with the binnacle by the manufacturer or his agent. The ordinary standard binnacle should be of bronze or brass, high enough for the compass to be higher than the rail, and with a stand heavy enough to prevent vibration. The hood (top) of the binnacle should fit so as to be easily removed, and so as to leave the top of the compass, when level, well above the binnacle. The hood should also be fitted so that an alidade can be shipped on its top, care being taken to have the lubber's mark on the hood to coincide with the lubber's mark on the standard compass.

###### MOUNTING THE STANDARD COMPASS.

In lake navigation, where courses are changed much more frequently than on ocean routes, it is advisable to mount the standard compass on the top of the pilot house, where it is accessible at all times to the officer on watch, and is least obstructed for an all-around view. It is very desirable (as will be seen farther on) that a directly ahead bearing be obtained; but the compass should in all cases be placed on the midship line.

The binnacle should be placed far enough from the edge of the pilot house to permit taking bearings in every direction; it should also be so far from the steering compass that the magnets used for compensating the standard compass will not influence the steering compass.

It may here be remarked that the position of deck beams should not enter into consideration when a position for the binnacle is selected; the deck under the binnacle can be easily strengthened to give a firm hold to the bolts securing it.

Every sailor knows that as little iron as possible should be used in the construction and fittings of a pilot house, and that the hand rail around it should be either of brass or wood; but a hint to designers and superintendents of construction may not be out of place.

Iron that is subject to temporary removal or change of old position should be at least 15 feet from the compass. No iron smoke pipes, ventilators, stands for engine-room indicators, bells, or whistles should be near the position selected for the standard compass. If necessary to have them they should be of bronze or brass. Inside the pilot house no lockers should be built near the place selected for the steering compass or any stow holes left to drop things into. The stand, wheel, spindle, and shafting of the steam steering gear should be of brass for a distance of 8 feet from the compass. The system of double wires should be employed in all electric installations on board ship and no single electric wires should lead anywhere near the standard or other compass. Even in well placed standard compasses on iron and steel ships the deviation is often from 3 to 4 points before compensation. Before securing the binnacle to the deck for a full due, it might be well to get the opinion of an expert as to the best position for it, without losing sight of its convenience for use by the officer on duty.

###### THE STEERING COMPASS.

The steering compass should be a liquid compass of reliable make, with a card  $7\frac{1}{2}$  inches in diameter marked for degrees, and possessing the same qualities in smooth and rough weather as the standard compass. In long steamers (which do not yaw badly in a heavy sea) courses should be steered to degrees; practically, greater accuracy is obtained by steering to degrees and, where possible, courses to degrees should be taken from the charts. Where the compass rose on the chart is not marked to degrees the navigator can use the isinglass compass (in common use under several names) to take off the course.

###### MOUNTING THE STEERING COMPASS.

As much consideration as possible should be given to lessen the iron near the compass. If there is a steam coil in the pilot house the tubing should be of brass or copper; stands for engine-room indicators and bell or whistle pulls should not be of iron; it is important that sash weights for

windows should not be of iron. The steering compass in iron or steel vessels should if possible be amidships and its lubber's mark in the fore and aft line. The compass needle should be at least  $3\frac{1}{2}$  feet from iron deck beams and as far as possible from vertical iron. Whether there is only one steering compass, or two, it is of the greatest importance that it be placed so that the lubber's mark and the point directly opposite are in a fore and aft line. The binnacles for steering compasses should be provided with good lights.

(To be Continued.)

##### NOTES.

Efforts are being made to have the authorities at Washington take possession of old Fort Mackinac, and make it a regularly garrisoned army post. Many people thought that it already was one, but it was abandoned two years ago.

The overflowed regions of the Mississippi are again assuming their wonted activity. The levees are being repaired as the water recedes, and the people who have been camping on the higher ground will return to their homes in what may be considered the lowlands, or land lower than the bed of the river.

The Hydrographic Office, Navy Department, has just issued the N. Pacific pilot chart for June, and if such a thing is possible, it seems to contain more special information than some previous issues. The location of the derelict schooner General Siglin, is given on May 5, off Queen Charlotte Islands, in latitude 53 degrees north, longitude 153 degrees 30 minutes west. Commander Craig, U. S. N., Hydrographer, is to be complimented on the compilation of the valuable data contained in the June chart.

The word "ton," as applied to the measurement of vessels, has a certain definite meaning, well settled by custom, as also, the United States Circuit Court of Appeals holds (the Thomas Melville), by the navigation laws of the United States, and it means 100 cubic feet of interior space. The entire cubic contents of the interior space, numbered in tons, is called the "gross tonnage." When from the entire cubic contents of the interior of a vessel, there are deducted the spaces occupied by the crew and propelling machinery, the remainder, numbered in tons, is called the "net tonnage."—Business Law Weekly.

The American Protective Tariff League has just issued, in document form, the speech of Senator Elkins, of West Virginia, on the subject of the American Merchant Marine and Discriminating Duties. This is a complete presentation of the benefits of discriminating duties as pledged by the Republican platform. Any of our readers can obtain a copy for 2 cents. Ask for Document No. 44 and address W. F. Wakeman, General Secretary, 135 West 23d street, New York.

According to some authorities Stephen Crane depicted the feeling of a soldier in battle better from his imagination alone, than others had done it from actual experience. Those who read "The Open Boat," in the June number of Scribner's Magazine, will agree that he has pictured the sensations of the shipwrecked better from his own experience of it, than others have achieved it by force of imagination. It is a remarkable tribute to his cleverness that he should have succeeded equally in pure imagination and in a transcript of reality. This is the first elaborate account of his terrible experience, after the wreck of the steamer "Commodore" when on its way to Cuba.

It has taken a clever Frenchman to discover a kind of barometer which may be safely called unique, Harper's Round Table says. An English journal says that it is nothing more nor less than the figure of a general made of gingerbread. He buys one every year, and takes it home and hangs it by a string on a nail. Gingerbread, as every one knows, is easily affected by changes in the atmosphere. The slightest moisture renders it soft, while in dry weather it grows hard and tough. Every morning, on going out, the Frenchman asks his servant, "What does the general say?" and the man applies his thumb to the gingerbread figure. Perhaps he may reply, "The general feels soft. He would advise you taking an umbrella." On the other hand, if the gingerbread is hard and unyielding to the touch, it is safe to go forth in one's best attire, umbrellaless and confident. The Frenchman declares that the general has never yet proved unworthy of the confidence placed in him, and would advise all whose purse will not allow them to purchase a barometer or aneroid, to see what the local baker can do for them in the gingerbread line.

\*U. S. Navy standard.



## TELEGRAPHIC SIGNALS ON BOARD SHIP.

H. A. Johnson, U. S. consul at Venice, in his consular report to Washington, says: The invention of an electric telegraphic apparatus, to be used on board ship in communicating orders from the bridge to the engine room or other parts of the vessel, has been brought to my notice during the past few days. The apparatus in question was invented by two electrical machinists employed until recently in the royal arsenal here, Messrs. Rodolfo Farinato and Antonio Sartori, and, so far as can be learned, possesses decided advantages over the method at present in use on board merchant vessels and ships of war.

I inclose a photograph\* of the dial of the indicator, if such it can be called. The superiority of this over other systems of telegraphic signals is the extreme simplicity of its mechanism, the facility with which it can be operated, and the limited cost of introduction and maintenance, as a battery of only twelve Leclanche cells are necessary, which, besides furnishing ample electricity for the signals proper, is sufficient to work the automatic call bells which form part of the signaling apparatus.

The mode of operating this system of signaling is as follows: A circular dial, having a pointer and a movable handle, is placed at a convenient post on the bridge or any other point of the vessel. This dial can be placed either against a bulkhead or partition or upon an upright column. The circumference of the dial is divided into twelve parts. The top and bottom divisions contain the word "arresta" (stop), while the right-hand semicircle contains the words of command for going ahead, as slowly, half speed, full speed, etc., and the left-hand semicircle similar orders for going astern. Another dial identically the same, is placed in the engine room or any other part of the vessel where orders are to be given from the bridge. When it is desired by the officer in command to send an order, say, to the engine room, he simply turns the handle until it rests upon the word of command desired. By this moment, the pointer on the corresponding dial in the engine room is made to indicate the word of command given, and at the same time the automatic call bells commence ringing, both on the bridge and in the engine room, till the engineer moves the handle of his dial until it comes into coincidence with the pointer, at which instant the call bells cease ringing and the pointer of the bridge dial points to the order as having been executed, in this way making it impossible for any error in understanding the command to occur. The same process is pursued in the execution of any of the words of command on the dial.

The inventors of this apparatus claim that they are acquainted with the systems of signaling orders at present used on board of the ships of all the principal nations, and that theirs is superior both as regards promptness and security of action. All the internal component parts are covered with silver and platinum and the exposed parts are nickered, thus guarantying perfect working and impermeability.

Besides being used to communicate orders from the bridge to the engine room, it can be used between the engine and fire rooms, greatly facilitating thereby the quick transmission of orders.

On board of large vessels of war, it can be used with great advantage in communicating from the bridge to the different ammunition magazines, and for this purpose the dial can be placed so as to be visible in the same manner as the electric lights for illuminating the magazines. Of course, the apparatus being patented at present only in Italy, it is impossible to have from the inventors other than a simple description of the method of operation. Messrs. Balti & Co., of Venice, have the exclusive privilege of manufacturing this article, both for Italy and abroad.

I do not know what system is at present used by our naval authorities, but I forward this brief notice to the Department, with the suggestion that their attention be called to the matter, and in case any further information should be desired, I could take steps to procure it.

The apparatus was tried the other day, by way of experiment, by the Italian authorities here on board the *Governolo*, and, so far as can be learned, gave most satisfactory results.

\*Filed in Bureau of Statistics, Department of State.

## TOWING AT SANDUSKY.

The Sandusky Tug Association, which was formed at the opening of navigation last season and continued on

fair terms throughout the summer, has not eventuated this year and the result is that it is a sort of go as you please in towing rates and service.

The rule last year was that a vessel would pay a certain per cent of her registered tonnage for being towed in or out, and each tug to take her turn in towing. Under this arrangement the two tug lines received a fair compensation, but this season towing rates have been cut in two, and in some cases less. No general system is observed, each tug capturing a tow whenever and wherever she can.

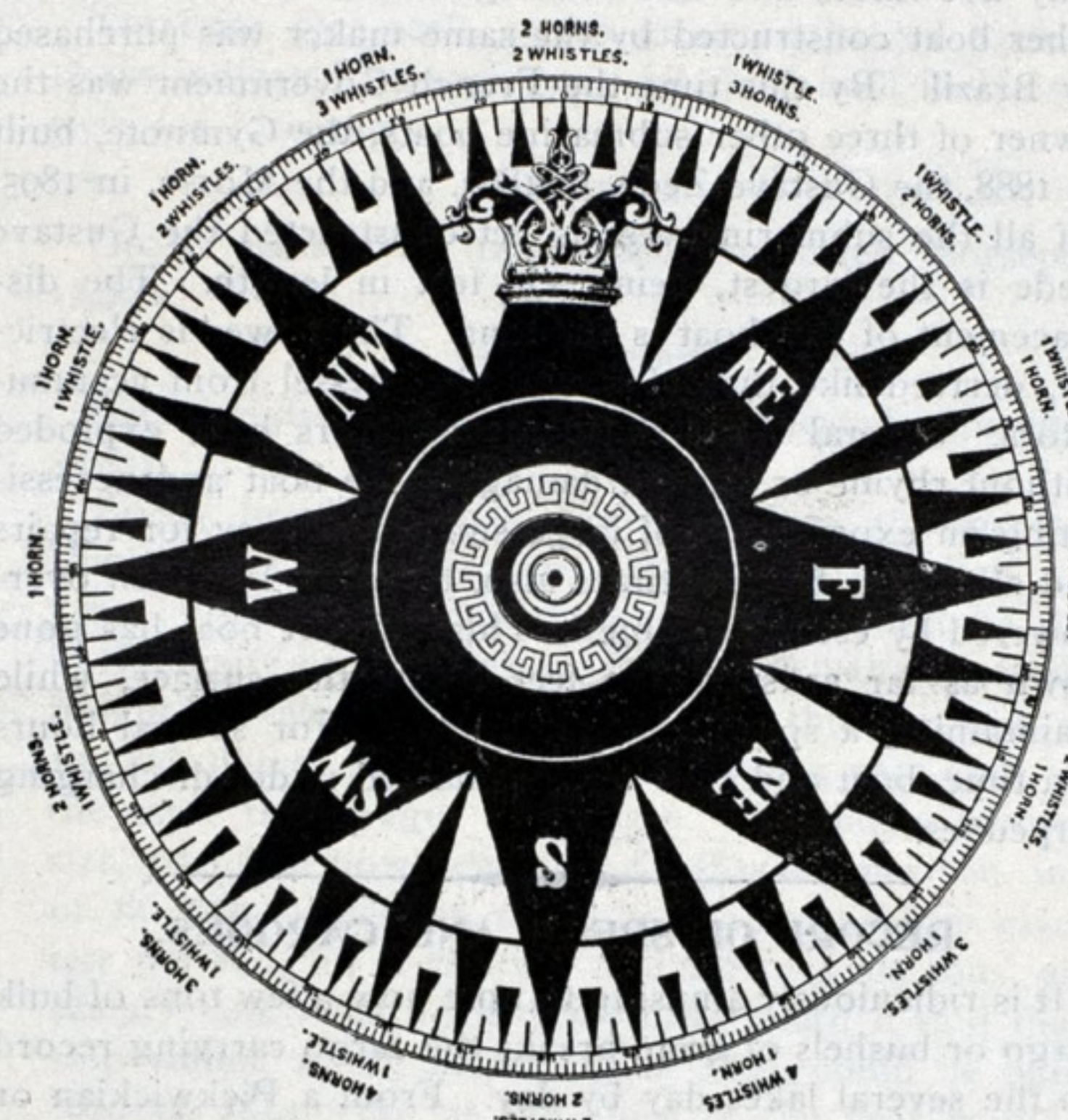
## FOG SIGNALS FOR STEAMERS.

(Illustrated.)

Among the greatest dangers to navigation is collision caused by fog. This danger arises principally from the fact that, while one ship can hear by signals that another ship is near or approaching, neither vessel can determine in what direction the other is moving.

To overcome this difficulty as far as possible, Alfred Christensen, consular agent, Elsinore, calls attention to a system of "fog signals for steamers" consisting of sirens of two different sounds (whistle and horn), by means of which a steamer is constantly enabled to signal the course she is steering.

As the principal courses over the Atlantic and also over the North Sea and Baltic are toward the east or west, the inventor says he has taken one sound of a whistle to indicate a due easterly course and one sound of a horn to



indicate a due westerly course. All other courses to the eastward begin with the sound of whistle followed by sound of horn, and all other courses to the westward begin with sound of horn followed by sound of whistle.

For a complete understanding of the system, reference is made to the accompanying chart, which is self-explanatory.

To provide steamers with sirens of two different sounds will cost only a trifle, and one cannot help thinking that the system is so plain and simple that, if it should be adopted as an international rule, it would greatly lessen the danger of future collisions and proportionately save life and property. Before presenting the system to the American Government, the inventor has consulted several shipmasters and marine officers, and they all concur in this opinion.

In view of the fact that the new international rules of the road go into effect on July 1, 1897, the inventor brings the system to notice, that it may be referred to the proper Department for such consideration as it may deserve.

## CHARTS RECEIVED.

The Hydrographic Office, Bureau of Navigation, Washington, D.C., J. E. Craig, Commander, U.S.N., Hydrographer, has just issued an excellent chart on a large scale of the North Channel of Georgian Bay, from Mississauga Straits to Little Current, taken from Canadian surveys, 1885, to 1890. This is a much-called-for delineation, the work on which proves the value of the Division of Chart Construction, U. S. N. G. W. Littlehales, assistant in charge. A more perfect navigational guide it would be difficult to portray or wish for.

## MARITIME LAW.

## THE SANDFIELD.

AMERICAN SUGAR REFINING CO. VS. THE SANDFIELD.

(District Court, S. D. New York.

February 27, 1897.)

1. Damage to Cargo—Broken Rivet—Sea Perils. At the close of a stormy voyage on which a steel steamer was damaged about her decks, had her wheel chains parted, and her propeller shaft fractured by heavy seas, a leak was discovered around a rivet in the after port bilge. Three-sixteenths of an inch of the outer end of the rivet was gone; the end of the remaining part showed evidence of fracture. This bilge had been sounded daily before the heavy weather began, and had been opened and cleaned by the crew before the loading of the cargo. No water was entering it at such times. Held, upon evidence of similar loss of rivet heads in previous cases, probably from excessive vibration through the racing of the propeller in rough weather, that the rivet was fractured by that cause, which was a peril of the sea.

2. Same—Seaworthiness—Inequality in Strength of Rivets. The cylindrical part of the broken rivet was somewhat oblique to the plane of the inner head, showing that the holes in the overlapping plates through which it had been driven when hot were not perfectly true. Both heads of the rivet had something of a cant. No other was broken. Held, that although the cant at both ends might diminish its endurance by subjecting it to an unequal strain, yet, not being a weak or improper rivet, mere inequality in the strength of the rivet would not amount to unseaworthiness or a violation of a charter provision that the ship shall be "tight, staunch and strong."

3. Same—Sea Perils—Presumptive Cause. Where it satisfactorily appears that sea perils have been encountered adequate to cause damage to a seaworthy ship, and there is general proof of seaworthiness, the damage is presumptively due to such perils.

4. Same—Injury by Sea Water—Exception of Loss by Perils of the Sea.

Damage to cargo by sea water entering the hold around a loose rivet, which has been fractured by perils of the sea, is a loss by perils of the sea within the exceptions of a charter party and bill of lading.

5. Same—Diligence in Docking for Examination—Harter Act.

A comparatively new steel steamer, built by first-class makers, which had passed its first Lloyd's survey in February, 1895, when the whole bottom was inspected and the riveting found sound, started on the voyage in question in January, 1896. No accident to the bottom had intervened. Held, that reasonable care of a vessel does not require docking for examination more than once a year, in the absence of some known necessity for it, and that accordingly there was no lack of diligence in the inspection of the ship.

6. Same—Chartered Ship—Clause "All Conditions as Per Charter Party" in Indorsed Bills of Lading—Effect of Charter Exceptions—Latest Defect.

The goods were shipped in a chartered ship by the charterers, and the bills of lading contained the clause, "All conditions as per charter party." Held, that the receivers of the cargo, as indorsees of the bill of lading, took the goods subject to the provisions of the charter party; that the ship was entitled to the benefit of an exception of "latent defects in the hull" contained in the charter party; and that if there was any defect in the rivet, it was latent, and within the exception.

7. Same—Leaving Sluice Shut—Operation of Harter Act Not Impliedly excluded.

The charter party contained a number of exceptions, including perils of the sea, and a further provision that "nothing herein contained shall exempt the shipowner from liability to pay for damage to cargo occasioned by improper opening of valves, sluices or ports, or by causes other than those above excepted." Held (1) that the damage was by "a clause above excepted," in the sense of the clause; (2) that the engineer's neglect in leaving the sluice shut was not an "improper opening" of it; (3) that this clause did not impliedly exclude the operation of the Harter act or deprive the ship of the benefit of the exceptions therein contained.

8. Same—Harter Act "Management"—Leaving Sluice Shut.

The opening of a sluiceway, designed to open the bilges, was neglected during heavy weather. The accumulating water overflowed the bilges and damaged cargo properly stowed in the holds. Held, that the neglect to open the sluices was a fault in the "management of the ship," within the third section of the Harter act, and that the ship and owners were exempted thereby from liability for the resulting damage.

Libel by the American Sugar-Refining Co. against the steamship *Sandfield* to recover the sum of \$10,000 for damages to a cargo of sugar.

## SATISFACTORY.

Francombe and others, of Detroit, owners of the schooner *John A. Francombe*, which had such a hard time of it on Adams' Point shortly after the opening of navigation, have received from the insurance companies a satisfactory sum to compensate for her damage. The owner will take the boat and repair her for a lump sum. The companies were London concerns represented by Geo. L. McCurdy and other agents, of Chicago.





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THE MARINE RECORD PUBLISHING CO.,

Western Reserve Building, Cleveland, Ohio.

Entered at Cleveland Postoffice as second-class mail matter.

CLEVELAND, O., MAY 27, 1897.

The acting general superintendent of the U. S. Life-Saving Service, Washington, D. C., advertises in the current issue of the Record for proposals on the construction of ten 34-foot self-righting and self-bailing centerboard lifeboats, six of which are to be delivered at Grand Haven and four at a station in New Jersey.

The crew of the Lackawanna Line steamer Florida, sunk by collision with the Roby, are discreetly keeping silent relative to the action of the steamer just prior to the collision. Usually some of the crew, after an accident or casualty of this sort, are too willing to talk, and consequently the case is prejudged through the columns of the daily papers long before it comes to trial.

Congratulations are in order all around, because after jettisoning a few hundred tons of cargo it was found that the wooden sheathing on the bottom of the iron steamer E. M. Peck, ashore last week on Hyde Park Reef, near Chicago, had protected the vessel to such an extent that she was not badly damaged. The question that others would like to find out, is, How did she land there at all? Of course, her propeller put her there, but for what reason, why for because?

Many owners of medium-sized tonnage, and at that, begin to see that all their hard fighting in the past for a 20-21 foot channel has not turned out quite the universal blessing they anticipated, in point of fact it is rather acting as a boomerang in so far as returning evil actions for good intent may be construed, to recoil even as the weapons of the Australian aborigines are made to do. This tall water in the connecting links of the lakes is all right enough; at least, it gives a chance to the five and six thousand tonners, but how about those carrying only from two to three, not to mention anything smaller.

The idea that a vessel can hail from any port that her owners may select is now about exploded and it has become well known that the port of hail is actual evidence of the residence of the port of ownership, where the managing owner or the majority of owners, does business. It has long been customary, however, to consider the hailing port the point where the annual meeting of the company of owners takes place and although the business meeting may occupy but an hour and be quite informal, the fact of the so-called annual meeting being held there is considered sufficient to beat around the legal points involved. Any adjacent township where the tax assessment is low is usually picked out as a favorable port of hail when wishing to avoid extortionate taxation.

## TORPEDO BOATS.

Submarine navigation has always been a fascinating subject of experiment for scientists and seamen and more than the usual interest is now manifested as the time approaches when Uncle Sam will be launching a submarine torpedo boat of his own. The vessel will be so constructed that it can be propelled by steam on the surface of the water like an ordinary steamboat or when occasion demands can be propelled by electricity under the waves like the wonderful Nautilus, which Jules Verne created on paper.

The construction of submarine vessels has long baffled the wit of inventors. During the last five years some progress has been made which clears away difficulties that existed before. In the month of October, 1894, a working model of a torpedo boat was finished by Mr. Seymour Allan of Sydney, which proved to be the best yet made. The Naval Commander-in-Chief on the Australian Station, who witnessed the test, declared that "if the vessel would do what the model performed, naval warfare would be revolutionized." No vessel, however, has yet been constructed on the lines of this model.

The French, ever alive to the importance of securing a monopoly of improved craft, have given much attention to the problem. Admiral Aube of the French Navy has always been a friend of inventors. One of his proteges, M. Goubet, in 1888 produced a submarine boat whose motive power was electricity. The boat had a speed of only five knots and was not regarded as a success. Another boat constructed by the same maker was purchased by Brazil. By this time the French Government was the owner of three other submarine boats, the Gymnote, built in 1888, the Gustave Zede, in 1893, and the Morse, in 1895. Of all the submarine vessels yet constructed the Gustave Zede is the largest, being 130 feet in length. The displacement of this boat is 265 tons. The power is electricity, derived like that of the Goubet vessel from accumulators. Several times these accumulators have exploded without rhyme or reason, damaging the boat and necessitating an expenditure of large sums of money for repairs and changes. Several times also, the crew has been overpowered by escaping fumes. This 130-foot boat has gone down as far as sixty-five feet below the surface, while maintaining a speed of eight knots. For several hours at a time, boat and crew have remained under discharging torpedoes.

## RECORD OF SPEED AND CARGOES.

It is ridiculously amusing to note how a few tons of bulk cargo or bushels of grain breaks the cargo carrying record on the several lakes day by day. From a Pickwickian or Mark Twain standpoint, it smacks a good deal of the Polly Ann against the Susie Jane in speed trips up or down a canal or river, and the humorosity of the thing is that no two can be agreed relative to the respective merits of speed and dead weight capacity for two days together. One did not attempt to speed up on that particular trip, another is ordered not to, while a third could do if she wished. In loading cargoes, similar excuses or reasons prevail among the big fellows, as for instance, no more grain in the bin, loaded at a shoal water berth, ordered not to load deeper than a certain draft, etc., etc. As the Sault Ste. Marie canal records show, one allusion to the largest cargo of the season is amply sufficient, otherwise it is simply making a burlesque of the lake trade, and dragging it down to the level of a canal or mosquito fleet argument, of who washed the most sand off the banks in passing, or who rounded the barrel buoy with the key of the keelson lashed on to the jib truss first. The cook being a sea-faring man, we should of course defer to his opinion and ultimatum in the matter each day or week. Relative to speed records, there is something of maritime, national and international importance in recording a few hours' gain in speed of any vessel or steamer on the Atlantic ferry route, and from this point we presume the daily newspaper reporters on the lakes desire to draw comparisons, but, to the practical mind, they go as comparisons usually do. Whether the race is given to the tortoise or the hare, each have their merits and for that matter their demerits too. Experienced masters do not consider that they are now or ever will set the lake on fire; they usually give her all she went for as far as their judgment or orders carry them. The engineer, to hold up his end, generally gets all he can out of her, subject to conditions and orders. So that with so many ifs and probabilities in the way, who is to say relative to the ques-

tion of speed that by throwing economy of fuel consumption on one side, some of the flyers could not be let down a peg or two at any time, and thus make more records? As we have said, a season or quarterly return might be of some moment in considering certain classes of tonnage, their build, trade, equipment, fuel consumption, etc., etc. Furthermore, each type of vessel would require to be classified, wood, composite, iron and steel, with their respective net register tonnage considered, so as to show extraordinary efficiency or deficiency.

The United States representative at Havana, Cuba, will have his hands full in distributing that \$50,000 appropriated by Congress to aid distressed American subjects. Already the consulate has been besieged by a ravenous mob, who are willing to be American citizens pro tem for the temporary advantages to be derived therefrom. It appears to us that the more regular and ordinary method of placing one or more naval vessels on the spot to conserve the interests, protect the property, and if necessary to defend the lives of American citizens, would be more in consonance with international law and all precedents. If the island was an American colony, or was under the protection and jurisdiction of the United States there would be every reason for donating a sum of money, a cargo or cargoes of provisions, etc., to alleviate the sufferings of citizens, but to pour money or provisions into a foreign country so that our citizens may remain there still in a state of destitution, smacks too much of loud spoken charity, pensioning, and a departure from all precedents. It would be interesting to learn whether or not another fifty is to be donated after the present grant is expended. If the guerilla war is kept along on the same lines as at present it seems likely that several more \$50,000 appropriations will be necessary if the present course and ideas of succoring the distressed are to be maintained.

Several launches are scheduled to take place within the next week or two, all large cargo boats. An owner, judging from the present outlook, would certainly cogitate a while before contracting for new tonnage, and yet it is the private belief of some of the best-informed that the present conditions will soon change and business be brisk enough to suit even the chronic grumbler. It is a good idea to regard the present slack times as being temporary, for anyone who thinks otherwise would do himself and the community a service by taking a rural vacation. Times are sure to brighten.

The scare which the recent Rockefeller-Carnegie combination seems to have given certain people will soon pass over. The lake commerce has become too important and diversified for any combine, syndicate or corporation to corral. It is well known that Mr. Rockefeller was rather forced into the iron mining property through the Merritt Bros. of Duluth, and having invested so much was obliged to go farther to protect cash advances. The building of new tonnage was a sequel to the ownership of the mines. With the new tariff settled business will again flow in its regular channels, confidence be restored and a fair living chance given to all interests.

Traffic has been resumed through the Welland Canal after the break the Steamer Outhwaite made a few days ago. Relative to that same casualty it seems a trifle arbitrary that the canal authorities would not accept good and substantial bonds for the actual damage. It has always been customary to give bonds and the question has seldom, if ever, been raised in any part of the world before. However, instead of bonds, the Welland Canal authorities figured that they wanted a deposit of \$10,000 cash to cover a possible \$2,000 outlay in repairing damages, and presumably to meet any other claims which might be brought before them on account of the overflow.

## LAUNCHES.

The new steel steamer Niagara will be launched from the yards of F. W. Wheeler & Co. on Saturday. She has been built to the order of Crosthwaite et al., Buffalo.

The Chicago Shipbuilding Co. will launch the Amazon in a few days. This is the largest schooner or consort on the lakes and is built to the order of Capt. James Corrigan, Cleveland.

Capt. James Davidson, W. Bay City, will launch the wooden steamer Athens, sister ship to the Crete, in a few days.



## SHIPBUILDING IN EUROPE IN 1896.

When one speaks of shipbuilding, England assumes a prominent position. The tonnage which is yearly set in the water from the shipyards of that country far surpasses the tonnage which in the same space of time is built at all the other shipyards in the world. The year 1896 has been unusually good for English shipbuilding, for, with the exception of 1889, it has never before reached such a great tonnage. To form an idea of its fluctuations for a long period, we give below the tonnage built in England for the last sixteen years:

\*Translated from Dansk Søfartstidende, January 7, 1897, by Robert J. Kirk, consul, Copenhagen.

Year.	Tons.	Year.	Tons.
1881.....	1,000,000	1889.....	1,332,889
1882.....	1,200,000	1890.....	1,279,077
1883.....	1,250,000	1891.....	1,209,904
1884.....	750,000	1892.....	1,194,784
1885.....	540,000	1893.....	878,000
1886.....	473,675	1894.....	1,080,419
1887.....	578,668	1895.....	1,074,890
1888.....	903,687	1896.....	1,316,906

It will be seen from the above that the production at the beginning of the sixteen years was on the increase, and thereafter that it decreased greatly for the next three years, until the minimum was reached in 1886. Then comes a three-years' rise, followed by a decrease for four years, and then an increase for the last three years, of which 1896 far surpassed the other two. The conditions in 1896 were still more favorable than given, when one takes into consideration that in several private shipyards, men-of-war were built during the course of the year, only a part of which are included in the tonnage total.

The increase of tonnage in 1896 was about 240,000 tons, which has been almost equally divided among the greater shipyards. On the east coast, those of Blyth, Tyne, Wear, West Hartlepool, Tees, and Whitney built 150,000 tons more than last year; the Clyde, 60,000 tons; and Belfast, 18,000 tons.

Districts.	Tons.
Tyne.....	246,882
Blyth.....	3,363
Wear.....	218,350
West Hartlepool.....	83,299
Tees.....	110,314
Whitby.....	5,819
Clyde.....	420,841
Belfast.....	119,656
Barrow in Furness.....	14,054
Aberdeen and Dundee.....	9,433
Humber.....	27,734
Firth of Forth.....	8,650
Thames.....	16,601
Mersey.....	19,266
Maryport and Workington.....	5,554
Various.....	6,590
Total.....	1,316,906

In former years, the firm of W. Gray & Co., stood at the head of the list, with 63,086 tons, which this year is far surpassed by Messrs. Harland & Wolff, with 81,316 tons.

Of the ships built on the Clyde, 280 were steamers, with 374,027 tons, and 97 sailing ships, with 46,814 tons.

Besides several new types, as, for example, the trunk steamers, shipbuilding in 1896 has been marked by a continuation of the increase in the size of ships, begun in former years. As an example, we can name the firm of Harland & Wolff, Belfast, which has built 12 new steamers, of which 11 were over 4,500 tons each and the most of them over 5,000 tons; one of them, the Pennsylvania, reached even the size of 13,700 tons, gross register.

The figures for some of the other countries of Europe, as well as for the United States, in 1896, are the following:

## GERMANY.

Flensburg Schiffsbau Gesellschaft, Flensburg—21,604 gross registered tons, with 8,050 indicated horsepower; on the ways, 13,600 gross registered tons, with 5,775 indicated horsepower.

Vulcan Shipyards, Stettin—two steamships, each of 10,535 gross registered tons, with 7,000 indicated horsepower.

Reiherstieg Shipyard, Hamburg—4,819 gross registered tons, with 2,400 indicated horsepower.

J. G. Tecklenborg, Geestemünde—3,010 gross registered tons, with 2,100 indicated horsepower.

Henry Koch, Lubeck—3,572 gross registered tons, with 1,780 indicated horsepower.

Total for Germany, 54,075 gross registered tons, with 28,330 indicated horsepower.

## NORWAY.

Bergens Mechanical Workshops—Victoria, steel screw ship, 965 gross registered tons, with 550 indicated horsepower; Rio, steel screw ship, 501 gross registered tons, with 400 indicated horsepower; Hafnia, steel screw ship, 966 gross registered tons, with 550 indicated horsepower. Total, 2,522 gross registered tons, with 1,500 indicated horsepower.

## DENMARK.

Burmeister & Wain, Copenhagen—Sleipner, steel screw ship, 1,000 gross registered tons, with 2,300 indicated horsepower; Livonia, steel screw ship, 2,030 gross registered tons, with 800 indicated horsepower; Standart, steel screw ship, 4,200 gross registered tons, with 11,000 indicated horsepower. Total, 7,230 gross registered tons, with 14,100 indicated horsepower.

Helsingør Shipyards, Helsingør—Atlas, steel screw ship, 987 gross registered tons, with 400 indicated horsepower; Pronto, steel screw ship, 1,363 gross registered tons, with 600 indicated horsepower; Gunther, steel screw ship, 1,447 gross registered tons, with 600 indicated horsepower; Regina, steel screw ship, 2,163 gross registered tons, with 750 indicated horsepower. Total, 5,960 gross registered tons, with 2,350 indicated horsepower.

Total for Denmark, 13,190 gross registered tons, with 16,450 indicated horsepower. All ships built in Helsingør were for foreigners.

## AUSTRIA.

Gross registered tons, 6,686; indicated horsepower, 11,960.

## UNITED STATES.

Gross registered tons, 50,817; indicated horsepower, 48,847.

Prices, however, have increased along the increase in shipbuilding in 1896, especially in the last half of the year. One of the main reasons for this must be sought in the many orders for new ships, which the great rise in freights occasioned. Materials have thus become about 12s. 6d. dearer per ton than they were a year ago, and at the same time wages have risen. For boats of medium size, one firm now demands £7 (\$34.06) per ton, instead of £6 (\$29.20) per ton a year ago; a second firm gives the rise per ton, for a steamer of 4,000 to 5,000 tons, at 12s. (\$2.91); and from a third, we have heard it said that the ship which, at the beginning of 1896, could be built for £29,000 (\$141,138), at the close of the year would cost £32,000 (\$155,730).

## RECOVERED.

The fishing tug Boss, which disappeared from Two Rivers, Wis., on the night of January 17, 1885, was found about four miles out from that port, sunk in twenty feet of water, by two divers at work this week. The tug is in good condition, and will be raised as soon as the weather permits. The Boss was owned by Allie and Lafond, and valued at \$3,000.

## RECEIVER OF WRECKS.

A special from Alpena says: The cargo of the sunken steamer Florida is proving a rich harvest to the islanders off this place. The city's small hookers are now engaged in picking up flour, whisky, syrup and other merchandise with which the steamer was loaded. Capt. Persons, of Thunder Bay Island life-saving station, has succeeded in getting together 50 barrels of flour, a full barrel of whisky and some other stuff. The wind is now driving the wreckage over towards the Canada shore, and the Canadians will have a chance to lay in summer provisions.

The foregoing is about the most barefaced admission of thieving and robbery that we have ever seen in type. Where, in the name of goodness, is the receiver of wrecks, and why does he not exercise his authority at least in so far as to tell these people that the wrecked goods are not theirs? The next thing we will be hearing that the above people are teaching their children the Cornish boy's prayer: "God bless mammy, God bless daddy, and send a ship ashore before morning." We had thought that this barbarous spirit had died out and that the people would no longer rifle the pockets of drowned sailors, although stealing cargo is the next thing to it.

## LAKE FREIGHTS.

During the week we have had an example of how it must feel to march up the hill and then march down again, without having accomplished anything except consuming time and becoming wearied in doing so. Several of the largest boats were chartered at the tail end of last week to carry a block of ore from Lake Superior to Ohio ports at 60 cents, so far so good, it took some of the biggest carriers off the market and gave the medium-sized, outside craft a chance to secure something in the future, however, through a mistake in the transmitting of or reading a telegram or some such a circumstance the deal was declared off early this week and this alone had a tendency to shade freights 10 cents per ton, so that charters could have been made at 50 cents, as there is any quantity of tonnage on the market with a light movement of cargoes, in fact, no ore charters from the head of Lake Superior can be quoted for the week, and what is being carried from Marquette or Escanaba on the Ohio port rate is accepted at the same figures for Buffalo, 50 cents and 40 cents respectively.

The Chicago grain market is none too firm at 1-1-8 cents on corn or oats to Buffalo, and from Duluth only 1-4 cents is offered on wheat, though the elevators have recently received some large consignments. This is a slump of 1-4 cent from last week.

Coal charters have been dull all week with an all round rate of 20 cents from Buffalo or Ohio ports to Lakes Michigan or Superior. There are of course better rates to intermediate and shoal water ports where only small tonnage can reach and whose detention for a few days in discharging will not incur for demurrage as for instance Cleveland to Victoria Harbor, 40 cents; Ashtabula to Algonac, 35 cents, etc.

As noted in our last week's report, the greatest activity is found in the lumber charters and a large number of vessels of the class that suits that trade are as busy as they can be with more tonnage wanted.

## FLORIDA SUNK THROUGH COLLISION.

The wooden steamer Florida, 2,103 tons, built at Buffalo in 1889 and chartered by the Lackawanna Line, was sunk on Thursday last through collision with the wooden steamer George W. Roby, 1,843 tons, built at West Bay City in 1889 and owned by the W. H. Mack estate, Cleveland.

The Florida was bound from Chicago for Buffalo with a general cargo and the Roby was bound up light, having the schooner Becker in tow. At about 9 a. m., when between Presque Isle and Middle Island, the vessels exchanged passing signals, the weather being foggy, but before their way could be stopped they collided, the Roby striking the Florida nearly amidships on the starboard side, when the latter vessel sunk in from 30 to 40 fathoms within a few minutes.

The Roby rescued the crew of the sinking vessel and returned to Port Huron, where after repairs were made to her stem, she was ready for business again.

The Florida was valued at \$100,000; insured for \$80,000 with the new syndicate at Chicago; estimated value of cargo \$60,000. About \$5,000 will cover the damage to the Roby; insured with lake companies through Smith, Davis & Co., Buffalo, the policy also containing the usual collision clause.

## AUTOMATIC RELEASING HOOKS.

Capt. James R. Raymond, manager of the Standard Automatic Releasing Hook Co., an appliance for the lower block of boat davit tackles, has just received a very complimentary testimonial of the efficiency of the patent hooks from Capt. H. C. Daggett, master of the City of Augusta, owned by the New England & Savannah Steamship Co.

It appears that the Mallory Line steamer Leona recently took fire at sea, the City of Augusta sighting her, bore down and on lowering her boats to rescue the passengers, found the automatic releasing hooks to work like a charm, while on the other hand the Leona, fitted with the old-fashioned purchase, had much difficulty in getting her boats clear of the davit tackles. After this practical demonstration of the efficiency of the Standard Automatic releasing hook, it is not improbable that the Mallory Line will have their boats equipped with the device, which rendered such worthy service to their burning steamer.

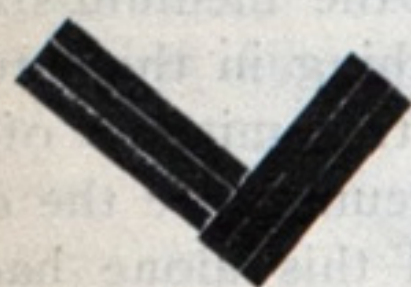
Among scores of others, in addition to the several government departments, Capt. Daggett highly recommends the patent automatic hooks, his boats being fully equipped with them.



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Marine Reporter.

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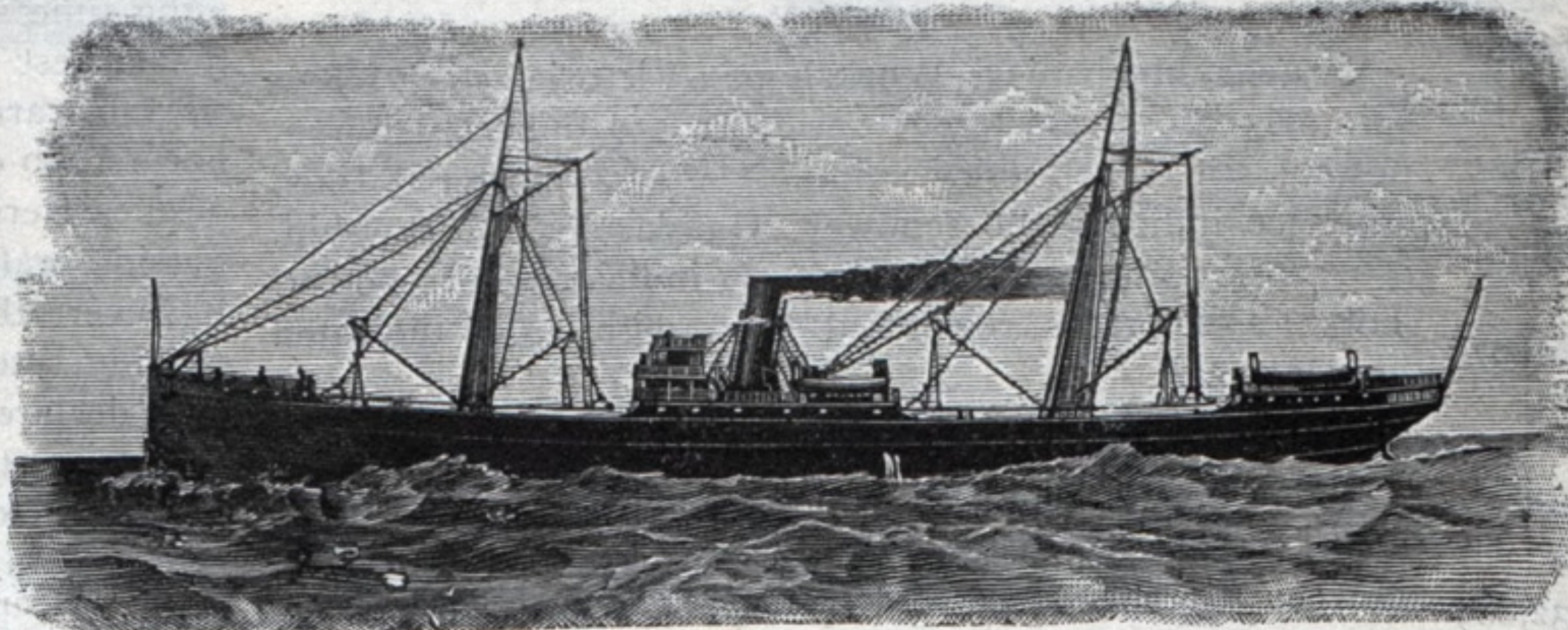
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covers, is stronger, lighter, and more  
durable than any water-proof goods  
yet produced. It is made of a twisted  
thread of pure flax, which renders it  
very strong. It will not crack like  
cotton goods, which is a great advan-  
tage.

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NOTHING IN THE WORLD LIKE IT.

**SNIDE CHARTERING.**

Relative to the recent Rockefeller chartering the Detroit Free Press has the following to say: "Word has reached this city that the charter of a dozen vessels to carry 60c-Rockefeller-Carnegie ore from Duluth to Lake Erie ports had been declared off temporarily, owing to a misunderstanding. Just the nature of this 'misunderstanding' the owners in this city do not know, nor have they a theory. The boats taken were the Carnegie, Rees, Yuma, Sitka, Bangor, E. C. Pope, Selwyn Eddy and Lagonda. All of these boats are owned by members of the Lake Carriers' Association.

"The published rate was 60c, but it is the opinion of some owners here that they were given a higher figure and the real rate kept under the hat so as to keep the rate down. It also comes from those well posted that the terms of the charter compelled the carriers to fuel with the shippers, or rather with certain fuel dealers, with whom the big combine had an agreement. In order to induce the carriers to consent to this arrangement it is just possible that they were given something better than 60c, but as the going rate is but 50c it is difficult to see why the 60c rate would not be enough, especially as the charter runs out August 1, or long before the fall improvement is supposed to set in.

"There seems to be no mistake about the fueling clause. The ore was to have been unloaded at Conneaut, Ashtabula, Fairport and Erie. At the two first-named ports Rockefeller has no fueling arrangements, and to obtain their fuel the vessels would have to go to Cleveland. The hardship of this requirement would be seen if a northerner were on. It would be impossible for the vessel to enter the narrow piers; she would have to run for another port or stand off and on. The price was the same, \$2 per ton, as charged by other dealers, but the quality is another question. That would have to be determined only by use. Then there is the very great delay which results in running miles out of a regular course in order to get fuel, which, were it not for the clause, might have been shot

into one part of the steamer while ore was being taken out of another.

"This will show the desperate straits to which owners are pushed in their endeavors to secure a little business for themselves. Rockefeller holds the whip hand, and he knows it well. He simply compelled the owners of a large class of steamers to come to his terms.

"It was rumored on Monday that the people who were to furnish the fuel were Pickands, Mather & Co., but this is authoritatively denied. The combine attempted to negotiate such a deal with that firm, which is located principally at Ashtabula, but failed. The Ashtabula company could not afford to enter into any such arrangement to mulct the vessel owners, with all of whom they have close and constant business dealings.

"The arrangement was made with certain dealers at Cleveland, Erie and Fairport; and its purpose was said to be simply to give the combine a rake-off, or a little more money to add to their big pile. Although this would not bear so heavily on the owners in the matter of prices as did the Buffalo hold-up, yet it was a species of extortion that the owners should not have submitted to. It took from them their independence, just for a little paltry chance to make a minute margin of money at one of the lowest contract rates ever offered out of Duluth. Now that the charter has fallen through it remains to be seen how the owners will treat these dealers in the future. It can be seen how they can use the boycott as effectively as they did in Buffalo, and they will have the opportunity, if carrying business offers, to get even with them.

"This giving in to the combine to that extent is looked upon here as an element of great weakness on the part of the owners. The chances are that it will give renewed life to the Buffalo hard coal shippers, and induce them to offer cargoes at slightly increased rates on condition that the owner of the vessel fuel with them. Will the owners refuse such blandishments?

"In the meantime the shippers say they hope to be able to renew these charters later. That is all the consola-

tion the owners can get out of it. If it is so, as hinted, that the shippers found they had made a mistake, in paying 60c, or 10c better than the going rate, and then concluded to slide out of the contract, there would seem to be a chance for lawsuits, as there certainly would be had the owners gone back on the charters."

**BEESON'S MARINE DIRECTORY.**

The Marine Directory for 1897 has just reached us from the publishing house in Chicago and in glancing through its pages we are pleased to note that several new features are contained in this the tenth annual edition over that of last year. Notably among which is a valuable list giving the dimensions of boilers and diameter of the cylinders of a large number of the best lake built steamers; also an inclusive table of the largest cargoes carried from time to time on the lakes.

The marked success of the Beeson Marine Directory cannot be considered phenomenal, as it only goes to show, that, in the proper hands, there was and is ample room for such a publication to flourish "like the green bay tree," and it appears that in the hands of its present energetic and generally well-liked proprietor, as if there could be no stop to its successes from year to year. Yet, from any other standpoint this publication has increased in circulation, subscriptions and advertising patronage at a marvelous rate so that today it has become almost a necessity to those engaged in marine and commercial lines of business where formerly it was considered an addition, adjunct, handy to have around, but still somewhat of a luxury as opposed to a work that all interests felt the value of.

With a feeling of justifiable pride, the author calls attention in his preface to the strong competition he had met with in former years and lived down and he trusts that future well-directed efforts on his part will maintain the leading position he now holds in the publication of a marine directory purporting to deal intimately and directly with lake interests alone.



**RUBBER PACKING.**

(Illustrated.)

Always endeavoring to keep well ahead of the times in their special manufacture, the Peerless Rubber Co., 16 Warren street, New York, are now out with the "honest John" hydraulic rainbow core packing and "Hercules" combination metallic stop valve packing, which we here-with illustrate.

It appears that the Peerless Co. have repeatedly been asked for a hydraulic packing equal in quality to their

**HERCULES COMBINATION****METALLIC STOP VALVE PACKING**

general line of goods, and after considerable experimenting have at last produced what they consider the most successful hydraulic and cold water packing ever yet placed upon the market.

The core is made of the well-known "rainbow" packing and acts as a cushion; the flax employed is of the finest Italian and the lubricant contained therein is especially

**HYDRAULIC RAINBOW CORE PACKING**

compounded to withstand the highest practical hydraulic pressure.

There are of course all sorts and grades of packing which might easily come under the headings of good, bad and indifferent, but from the large sales, general satisfaction and increasing demand for the "Honest John" and "Hercules" it is evident that these brands, either in

the straight or spiral form, are "stayers." Whenever once used, or at least until something more economical and efficient is placed upon the market, if such should be the case, or at that time, the Peerless Rubber Mfg. Co. of New York will be again found in the van with an article second to none, as experiments along this line are being steadily and continuously carried on at the works of this well and favorably known company.

**VISIBLE SUPPLY OF GRAIN**

As compiled for The Marine Record by George F. Stone, Secretary Chicago Board of Trade.

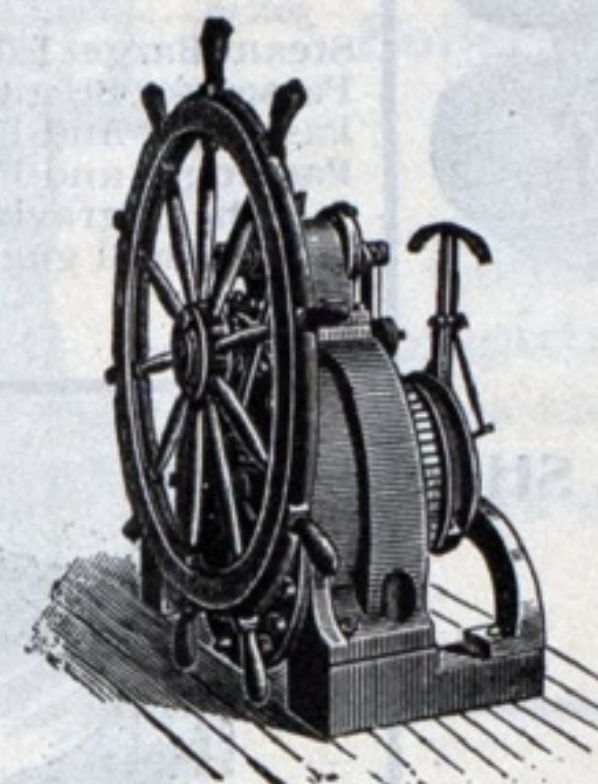
CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY. Bushels.
Albany.....		25,000	50,000		
Baltimore.....	164,000	609,000	55,000	84,000	
Boston.....	176,000	745,000	203,000	1,000	10,000
Buffalo.....	625,000	214,000	656,000	92,000	525,000
afloat.....					
Chicago.....	6,208,000	4,857,000	2,965,000	82,000	57,000
afloat.....					
Cincinnati.....	1,000	3,000	11,000		4,000
Detroit.....	76,000	1,000		9,000	
afloat.....					
Duluth and Superior.....	4,262,000	8,000	769,000	342,000	251,000
afloat.....					
Indianapolis.....	28,000	83,000			
Kansas City.....	175,000	157,000	166,000	5,000	
Milwaukee.....	170,000	3,000	13,000	362,000	162,000
afloat.....					
Minneapolis.....	11,782,000	77,000	171,000	21,000	1,000
Montreal.....	366,000	23,000	633,000	61,000	35,000
New York.....	726,000	2,077,000	1,289,000	359,000	257,000
afloat.....	54,000	58,000		34,000	38,000
Oswego.....		31,000	2,000		39,000
Peoria.....	2,000	1,000	36,000		
Philadelphia.....	172,000	288,000	98,000		
St. Louis.....	239,000	126,000	6,000	12,000	
afloat.....					
Toledo.....	829,000	223,000	43,000	72,000	
afloat.....					
Toronto.....	120,000		54,000		33,000
On Canal.....	324,000	292,000	176,000	491,000	160,000
On Lakes.....	1,797,000	1,562,000	1,451,000	133,000	55,000
On Mississippi.....		12,000	45,000		
Grand Total.....	28,296,000	11,475,000	8,889,000	2,898,000	1,524,000
Corresponding Date 1896.....	51,298,000	7,990,000	7,615,000	1,526,000	941,000

**EASTERN FREIGHT REPORT.**

According to the usual weekly freight report furnished The Marine Record by Messrs. Funch, Edye & Co., New

York, it is stated that since the last report the inquiry for grain tonnage, in spite of liberal arrivals of grain by lake and canal, has been extremely light, and, with the exception of a couple of charters effected of 12,000 quarter boat for August loading at 3s, confined to the berthing of larger boats in various directions at extremely low figures. Chartering for timber from the Gulf has continued active, and appears pretty well to absorb all the available tonnage in that quarter, whilst deal freights from the provinces show a slight decline under increased offering of tonnage, and, we fear, may collapse at any time under this pressure. The apparant inability of shippers to concede owners' demand for their tonnage on the Eastern route continues to interfere with charters in that direction, but it is likely that the poor present position and outlook for our freight market may shortly result in sufficient concession to enable some charters being put through.

Our list of charters for the week shows a number of fixtures for petroleum in barrels to Europe, mostly of smaller vessels or the United Kingdom, but in other lines remains unusually quiet, although rates have not undergone any material change in any direction.

**Queen City Hydraulic Steerer.**

THE BEST AND MOST POWERFUL STEERER FOR TUGS, STEAMERS, ETC.

MANUFACTURED BY  
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BUFFALO, N. Y.

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**Ansonia Brass & Copper Co.**

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Send for Pamphlet. 19-21 Cliff St., NEW YORK.

INCORPORATED 1794.

**Insurance Company of North America**

CAPITAL, Paid up in Cash, - - - \$3,000,000.00  
ASSETS, - - - - - 9,686,808.08

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GREVILLE E. FRYER, Sec'y and Treas.

T. HOUARD WRIGHT, Marine Secretary.

EUGENE L. ELLISON, Vice President.

JOHN H. ATWOOD, Assistant Secretary.

Lake Marine Department, GEORGE L. McCURDY, MANAGER.  
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from 80 to 365 days and nights without attention, and can be seen a distance of six miles.

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**Atlantic Mutual Insurance Co.**

Organized 1842.

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The profits of the Company revert to the assured, and are divided annually upon the premiums terminated during the year; thereby reducing the cost of insurance. For such dividends, certificates are issued bearing interest until ordered to be redeemed, in accordance with the charter.

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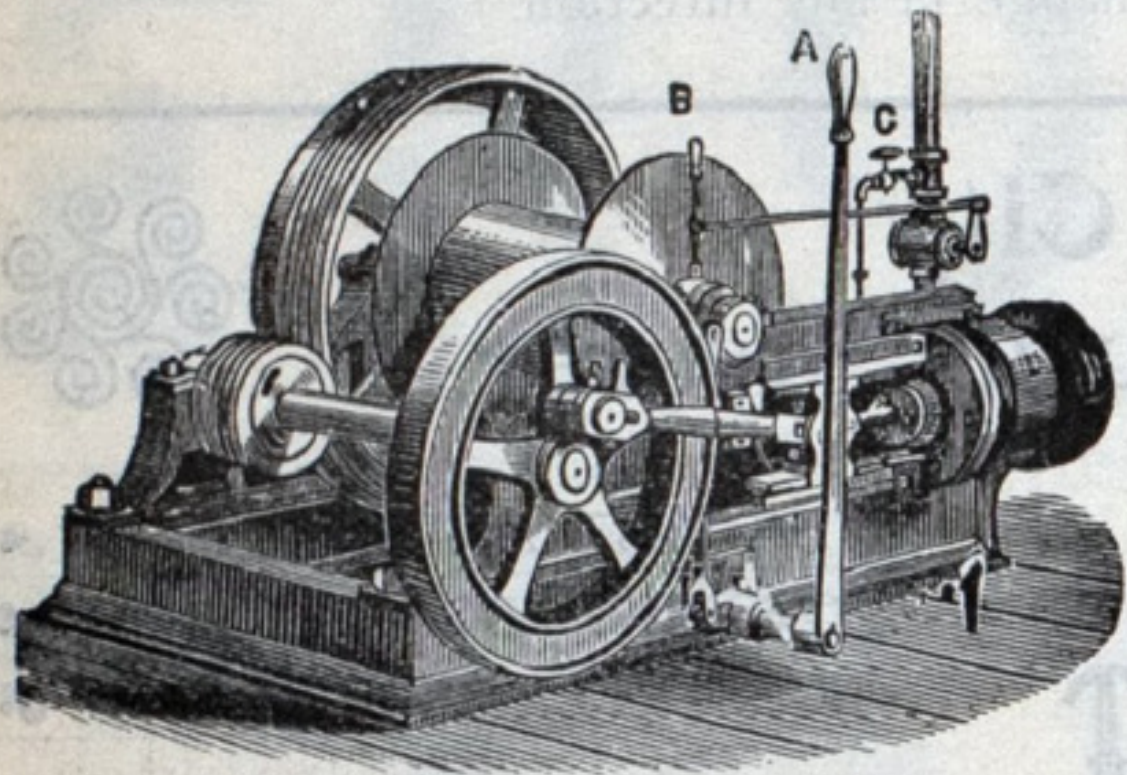


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**CONGRESS ST. BOSTON.**



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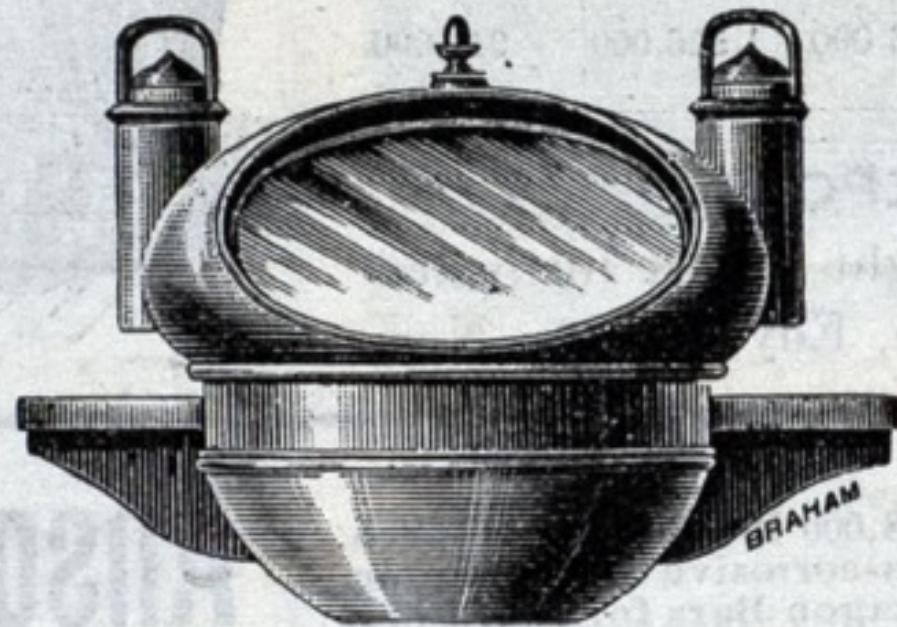
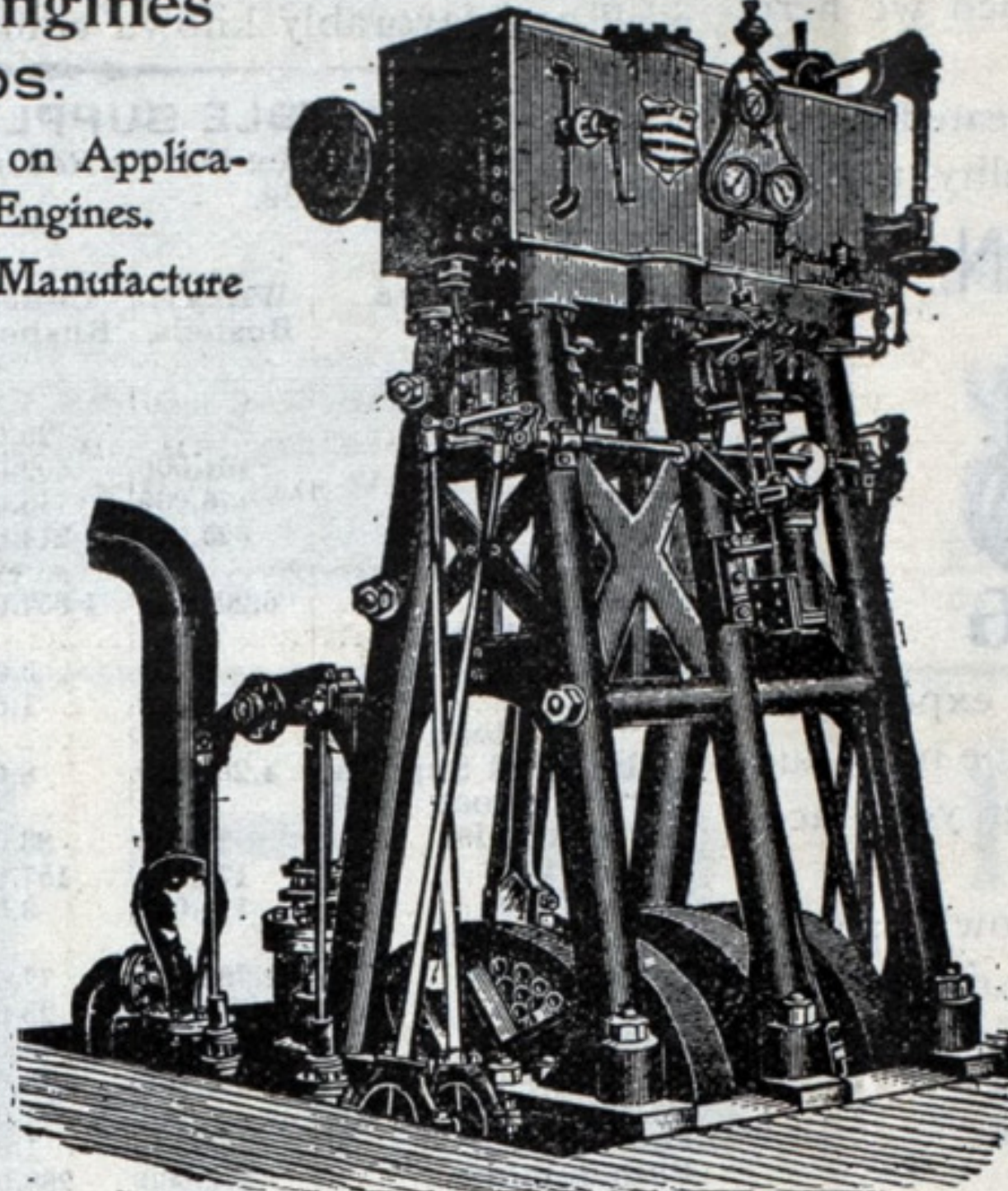
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Passenger Steamer Pilgrim, St. Clair, 14 and 28x20  
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Steamer Oval Agitator, Chicago, 14 and 28x20.  
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Tug Peter Coates, Sault Ste. Marie, 10 and 20x16.  
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Passenger Steamer Lotus, Escanaba, 16 and 30x24  
Steam Barge Sachem, Grand Haven, 21 and 38x36  
Passenger Steamer Bon Ami, Saugatuck, 14 and  
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Steam Barge Charles A. Street, Chicago, 20 and  
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Passenger Steamer E. G. Maxwell, Pentwater, 14 and 28x20.  
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Passenger and Freight Steamer Mabel Bradshaw, Muskegon, 26 and 28x26.  
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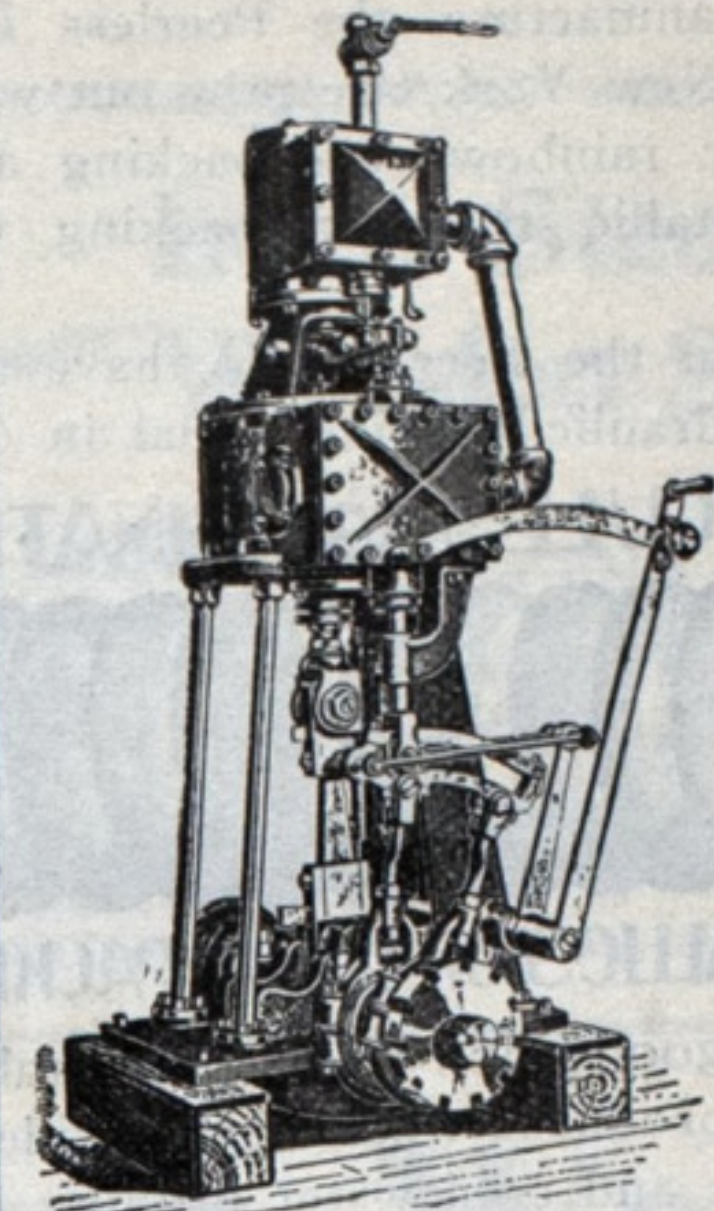
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POWER. These en-  
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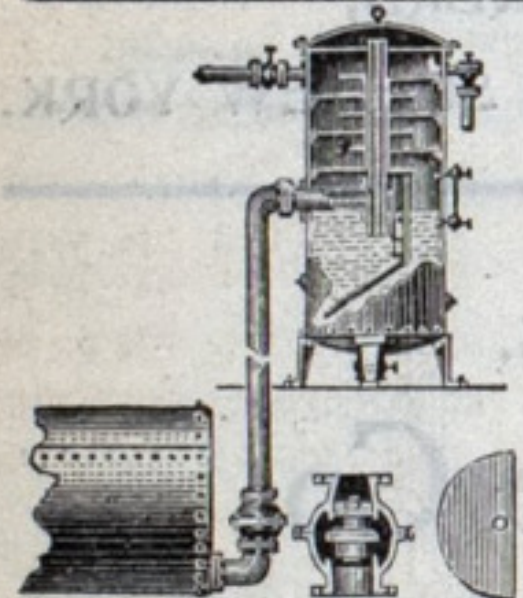
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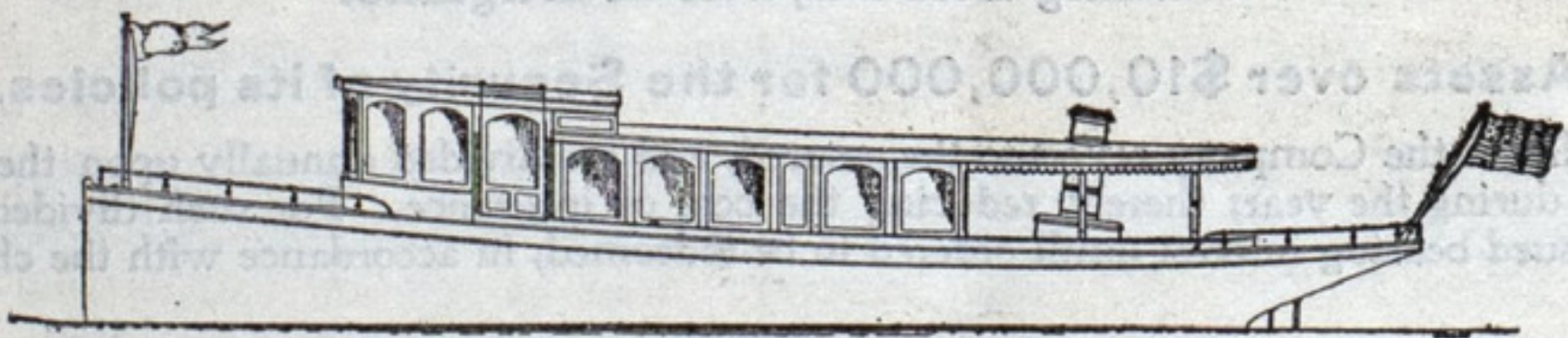
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GOOD  
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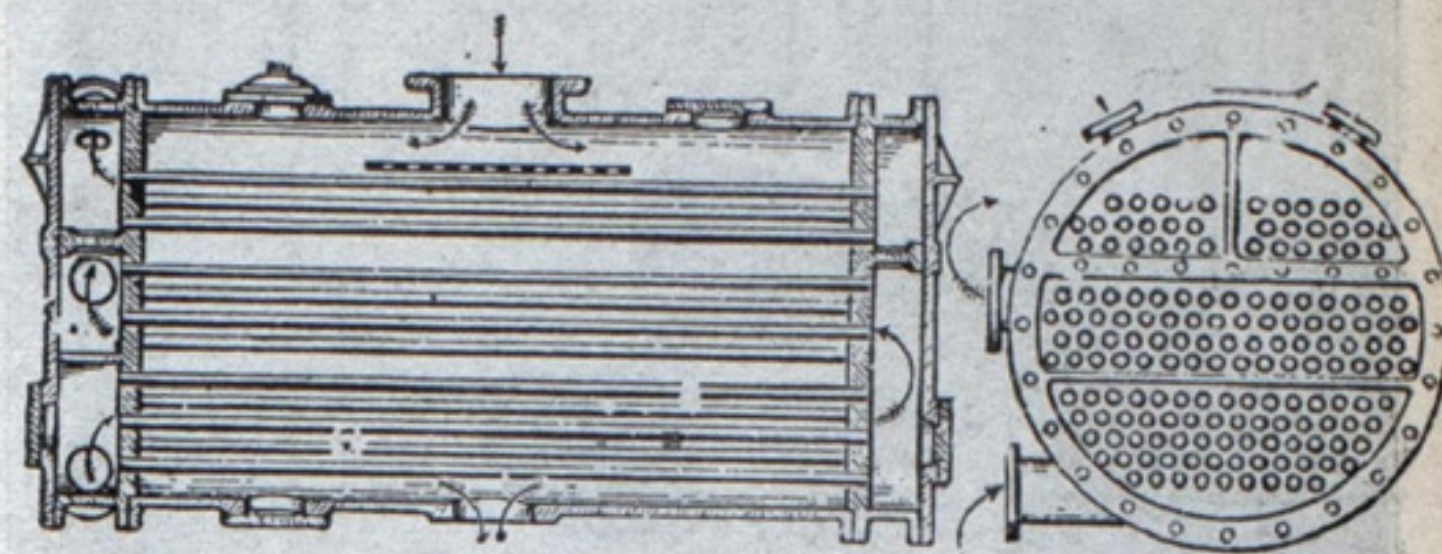
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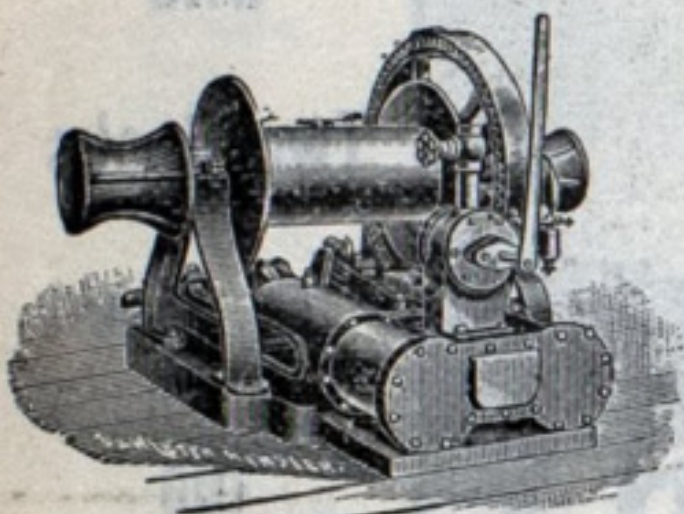
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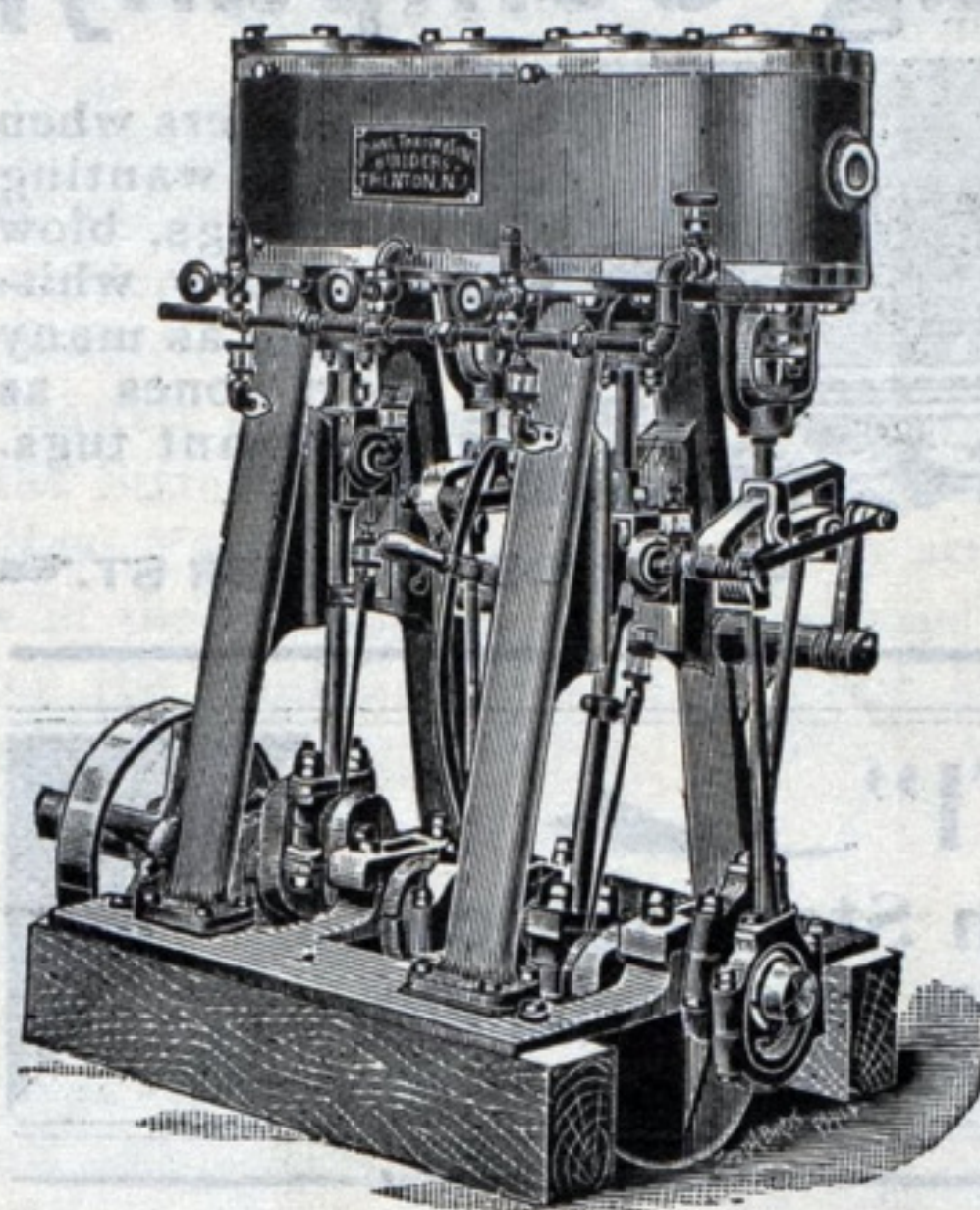
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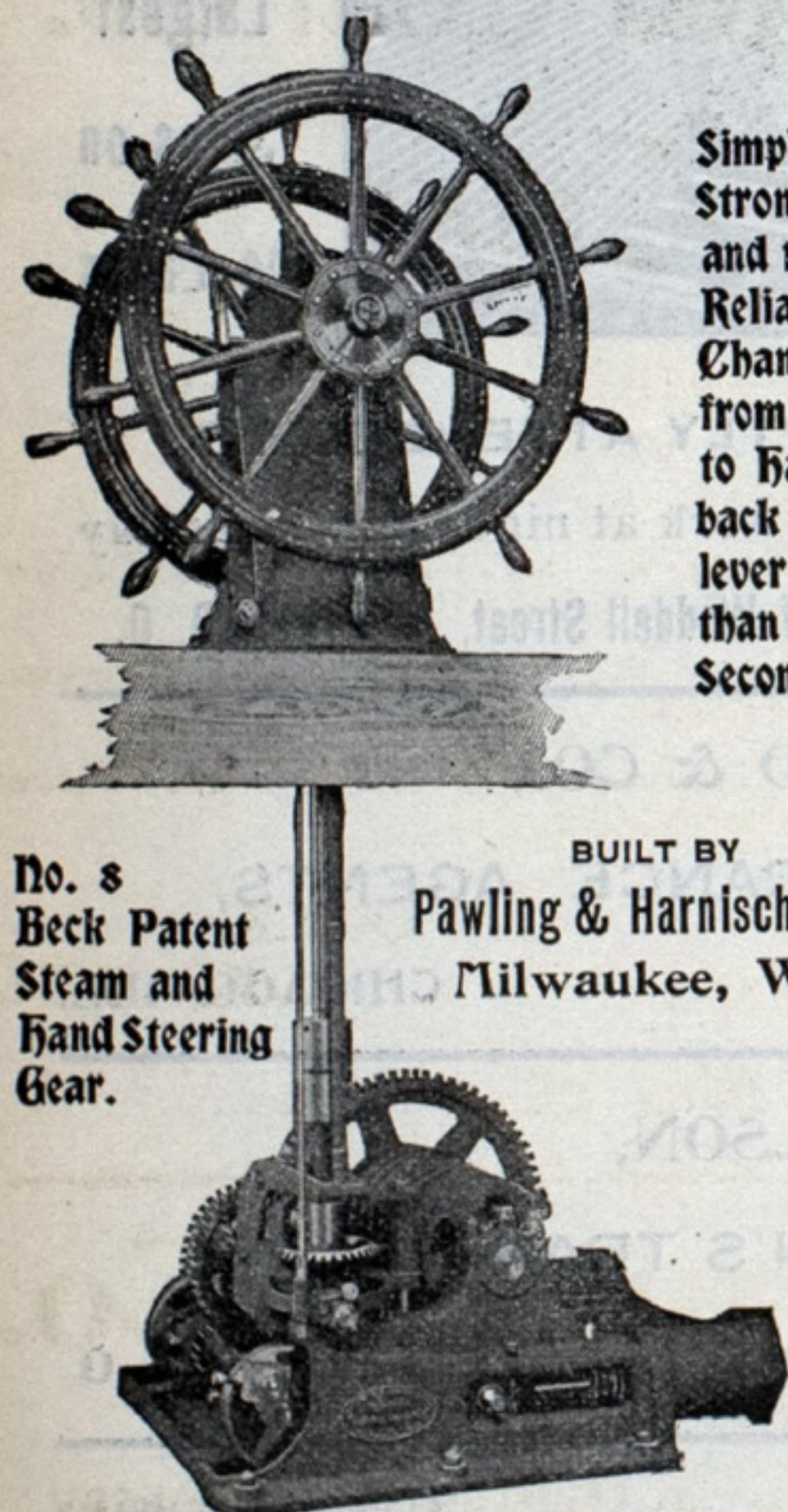
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Strongest  
and most  
Reliable.  
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Second.**Neversink Cork Jacket and Life Belt.**

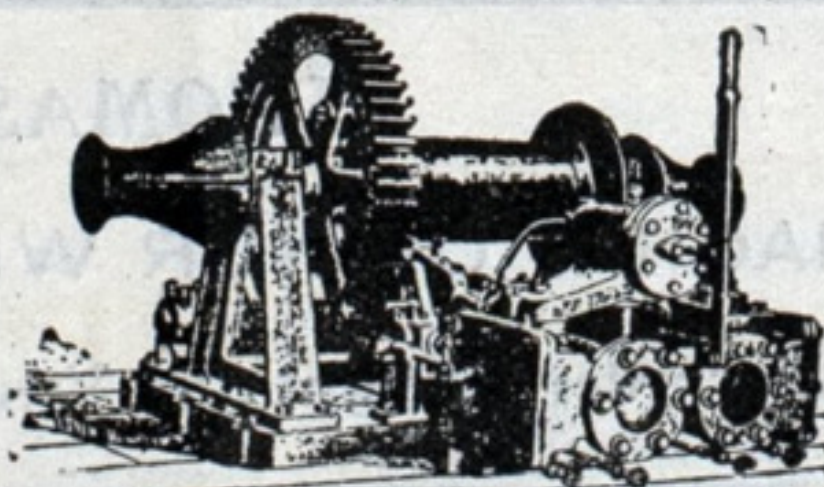
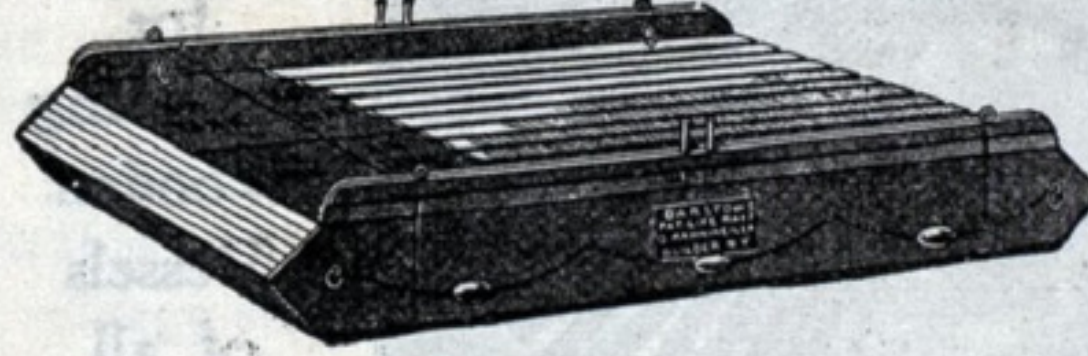
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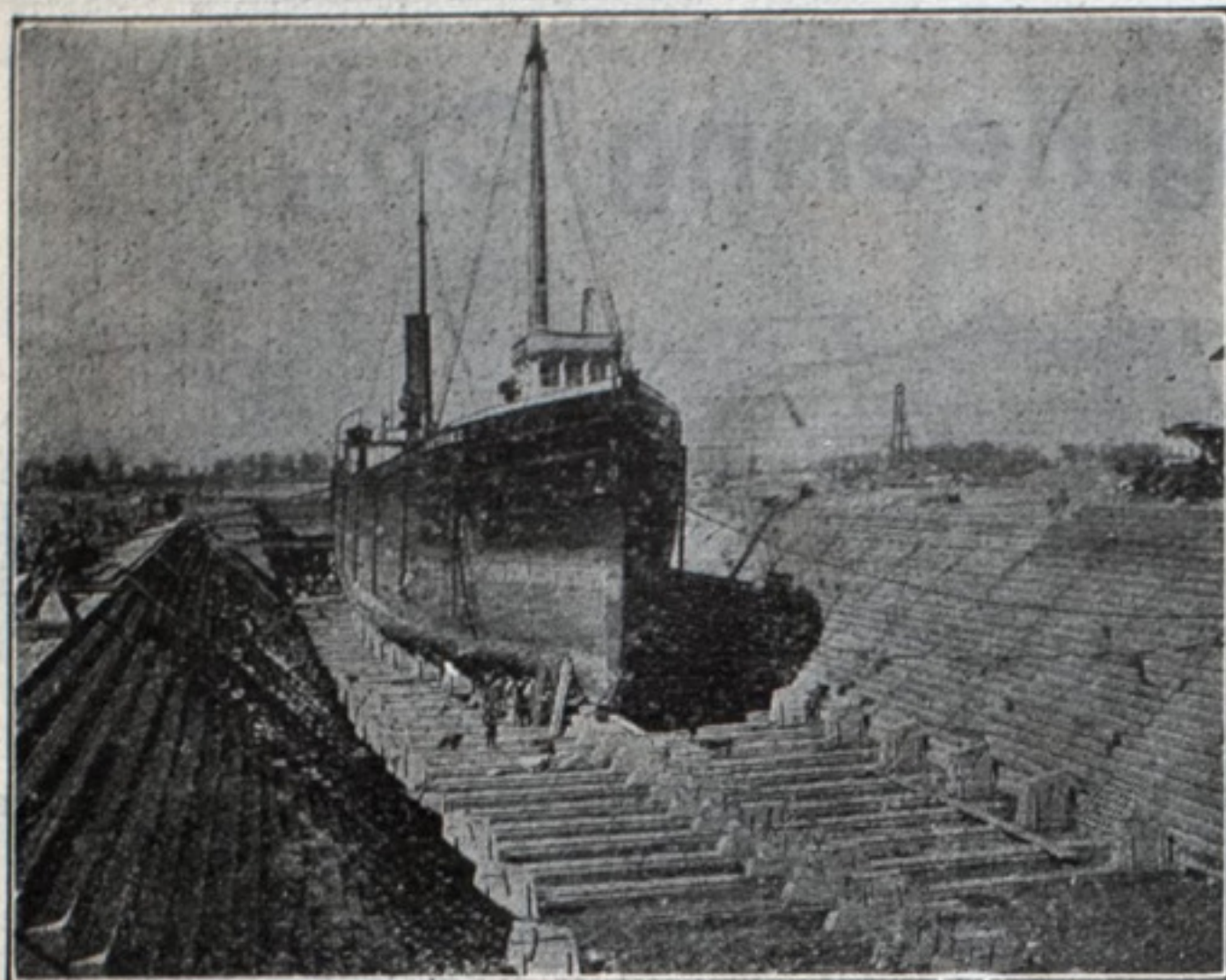
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SEVEN AND FOURTEEN INCH SUCTION.





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Simple, Powerful Machine.  
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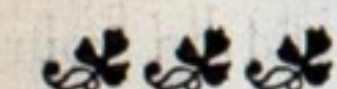
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Agents for the Lakes.

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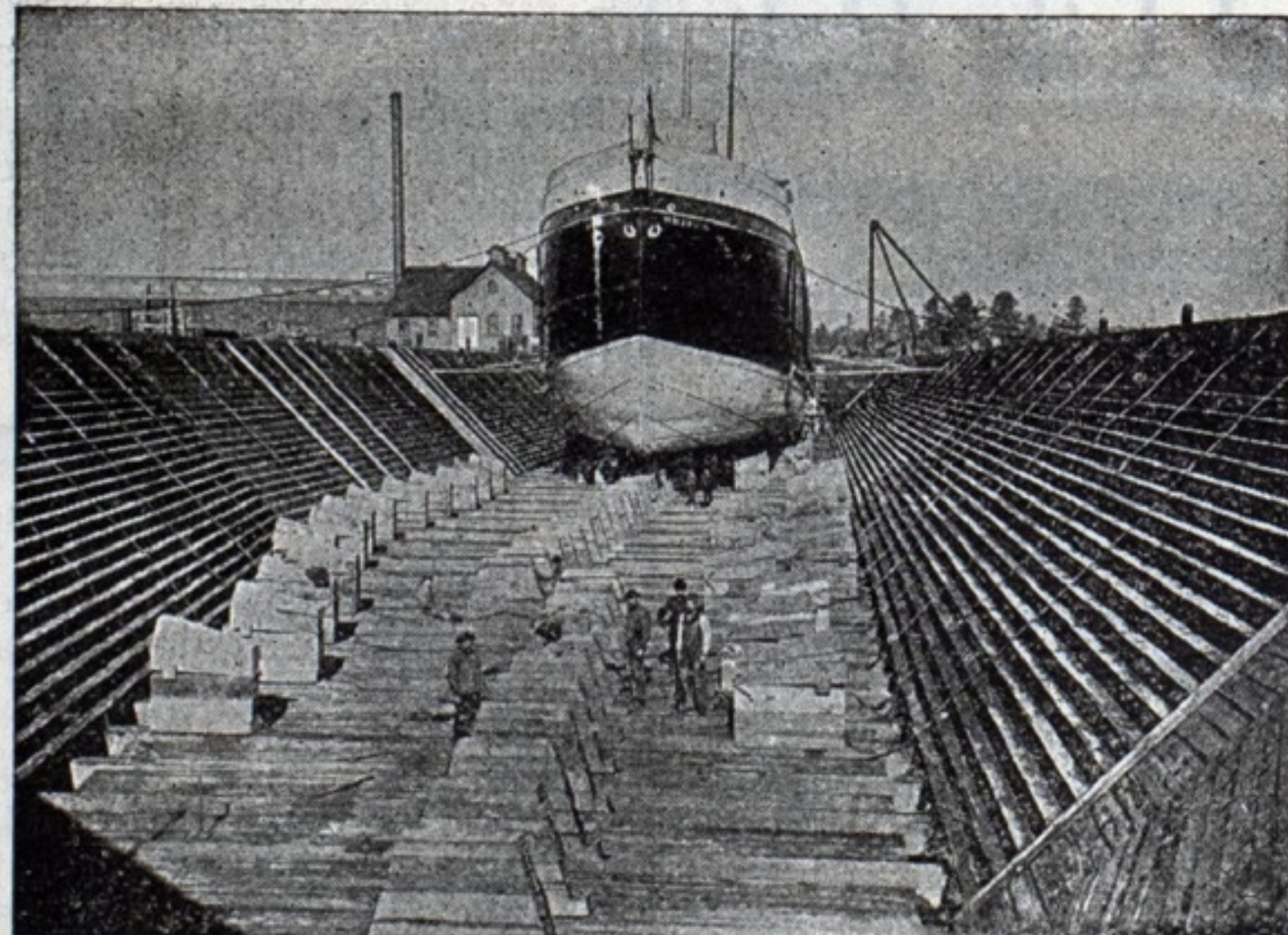
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Breadth, Bottom.....	52 "	Depth over Sills.....	18 "

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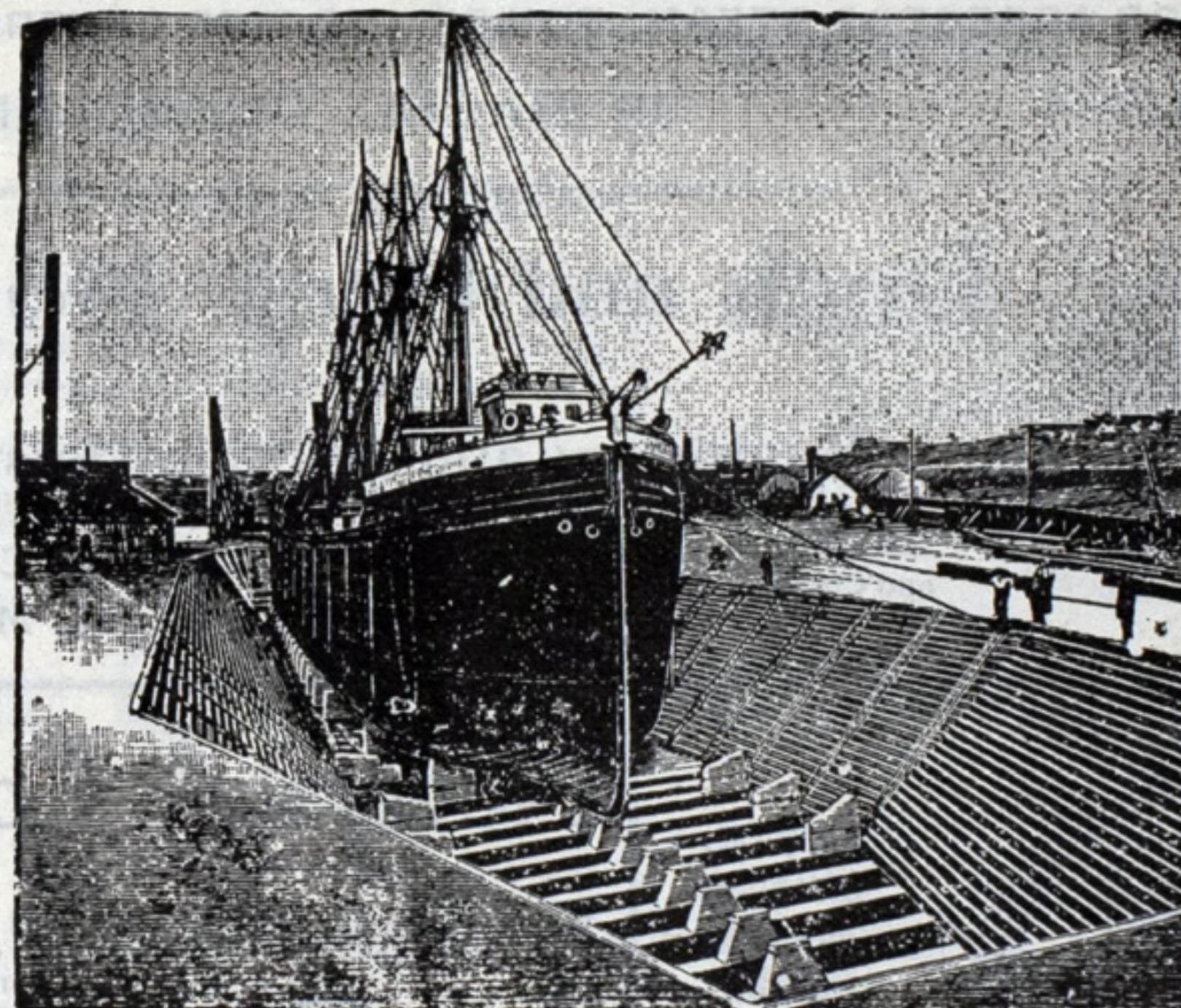
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